



Missouri Department of Natural Resources
Air Pollution Control Program
2012 Monitoring Network Plan

May 25, 2012

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SUMMARY OF PROPOSED CHANGES

Missouri's 2012 Monitoring Network Plan proposes to address:

- One new near-roadway nitrogen dioxide (NO₂) monitoring site in St. Louis,
- Planning for the second near-roadway NO₂ site in St. Louis,
- Planning for one near-roadway NO₂ site in Kansas City,
- Resumption of sulfur dioxide (SO₂) monitoring at the Mark Twain State Park Site,
- All year ozone monitoring at the Mark Twain State Park Site.

As part of the condition of receiving one-time section 103 Grant funds to implement some of the NO₂ near-roadway monitoring network the department will conduct special purpose PM_{2.5}, PM_{10LC}, PM_{10-2.5}, PM_{2.5} black carbon, meteorological, and carbon monoxide (CO) monitoring at the Forest Park near-roadway NO₂ site.

The plan also discusses lead monitoring that was discontinued at the Corridon and Webb City ambient air monitoring sites. PM₁₀ Monitoring was discontinued at the Hall St. site. The location of the Exide Lead monitoring site will be identified. More details concerning these changes are included throughout this Monitoring Network Plan.

Effective on or before October 1, 2011, the State of Missouri assumed daily ambient air monitoring activities formerly conducted by local air pollution control agencies in Springfield, St. Louis County and St. Louis City. The network table in Appendix 1 identifies monitors whose monitoring operations were transferred from the local agencies and are now under the State's responsibility.

How to Make Public Comments Concerning this Plan

Comments concerning this Monitoring Network Plan may be sent electronically to: cleanair@dnr.mo.gov or in writing to the following address and must be received by close of business June 28, 2012:

Missouri Department of Natural Resources
Air Pollution Control Program
Air Quality Analysis Section/Air Monitoring Unit
P.O. Box 176
Jefferson City, MO 65102

INTRODUCTION

The Missouri Department of Natural Resources operates an extensive network of ambient air monitors to comply with the Clean Air Act and its amendments. The Ambient Air Quality Monitoring Network for the State of Missouri consists of State and Local Air Monitoring Stations (SLAMS), Special Purpose Monitoring Stations (SPMS) monitoring and the National Core (NCore) monitoring consistent with requirements in federal regulation 40 CFR 58.10.

40 CFR 58.10 requires states submit to EPA an annual monitoring network plan including any proposed network changes. With regard to state and local air monitoring station changes, approval by the Environmental Protection Agency Regional Administrator is required.

The plan must contain the following information for each monitoring station in the network:

1. The Air Quality System site identification number for existing stations.
2. The location, including the street address and geographical coordinates, for each monitoring station.
3. The sampling and analysis method used for each measured parameter.
4. The operating schedule for each monitor.
5. Any proposal to remove or move a monitoring station within a period of eighteen months following the plan submittal.
6. The monitoring objective and spatial scale of representativeness for each monitor.
7. The identification of any sites that are or are not suitable for comparison against the annual PM_{2.5} National Ambient Air Quality Standard (NAAQS).
8. The metropolitan statistical area, core-based statistical area, combined statistical area or other area represented by the monitor.

Network Design

Federal regulation (40 CFR Part 58) establishes the design criteria for the ambient air monitoring network. The network is designed to meet three general objectives:

- Provide air pollution data to the public in a timely manner.
- Support compliance with ambient air quality standards and emissions strategy development.
- Support air pollution research studies.

Specific objectives for the monitoring sites are to determine the highest pollution concentrations in an area, to measure typical concentrations in areas of high population density, to determine the impact of significant sources or source categories, to determine general background levels and to determine the extent of regional pollutant transport among populated areas. Minimum site requirements are provided for ozone and particulate matter based on Core Based Statistical Area (CBSA) population.

Appendix E to Part 58 establishes the specific requirements for monitor/probe siting to ensure the ambient data represents the stated objectives and spatial scale. The requirements are

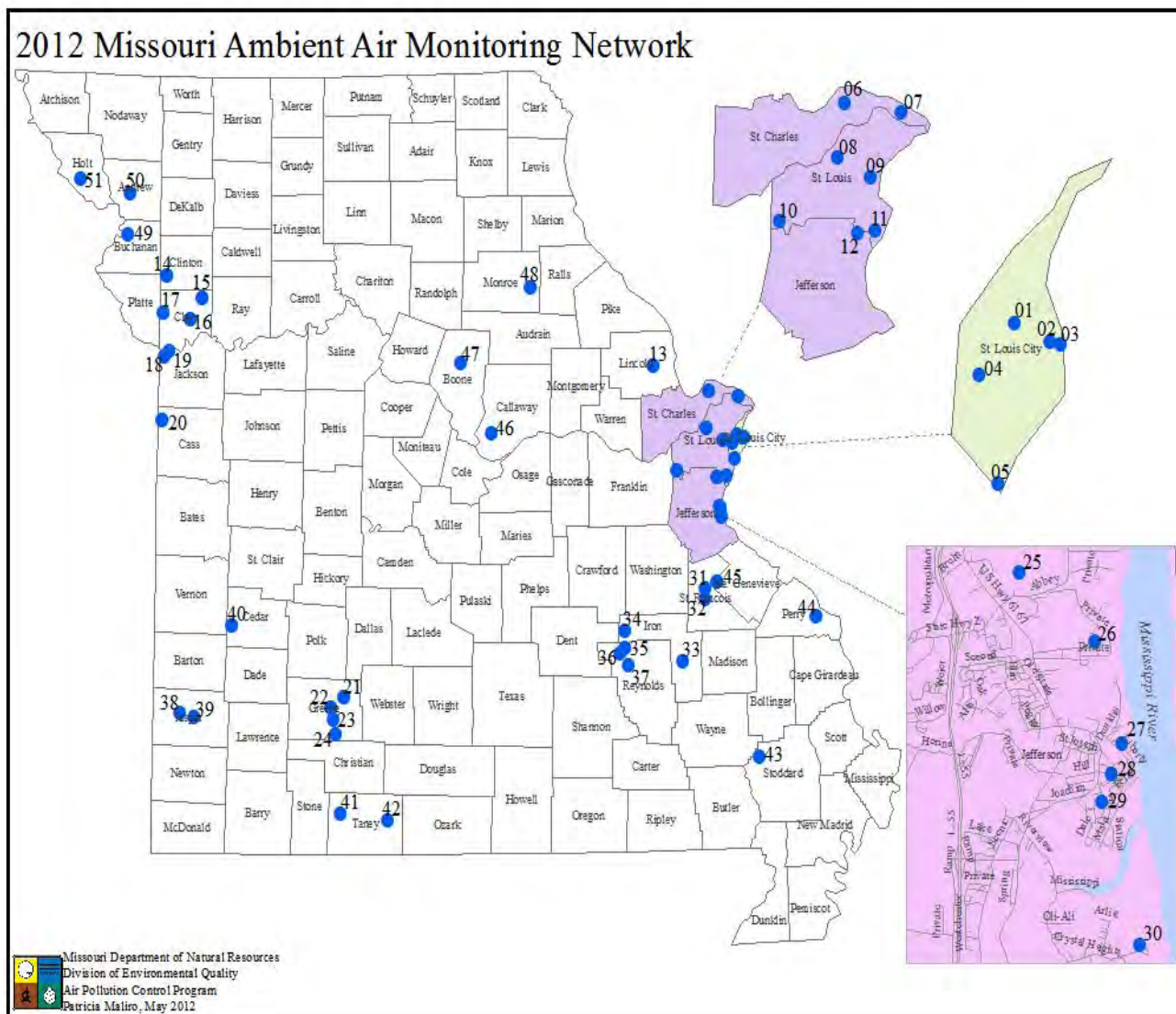
pollutant/scale specific and involve horizontal/vertical placement. Additional details concerning the sites may be found in Appendix 1.

There are only two PM_{2.5} monitors in Missouri that are not applicable for comparison to the annual NAAQS - Branch Street and the proposed Forest Park near-roadway monitor. Branch St. is a middle-scale site focused on a group of sources in the industrial riverfront area and is not neighborhood scale. The Forest Park monitor is a special purpose micro-scale site focused on PM_{2.5} mobile source impacts adjacent to Interstate I-40/64. The identification of any sites that are or are not suitable for comparison against the annual PM_{2.5} National Ambient Air Quality Standard is required of 40 CFR Part 58.10 (7).

Changes to the monitoring Network may occur outside the network planning process due to unforeseen circumstances resulting from severe weather, natural events, changes in property ownership, or other situations that occur after the monitoring plan has been posted for public inspection and approved by the EPA Regional Administrator. Any changes to the network that result due to conditions outside the state's logistical control and not included in the current monitoring network plan will be communicated in writing to EPA Region VII staff and identified in the subsequent annual monitoring network plan.

CURRENT AMBIENT AIR MONITORING NETWORK

The statewide current monitoring network is shown below in the map and table.



| Legend | | | | | | | | |
|--------------------------------|---------------------------|---|--------------------------------------|--------------------------|---|-----------------------------------|--|--|
| <u>St. Louis Area</u> | | | <u>Springfield Area Cont'</u> | | | <u>Outstate Area Cont'</u> | | |
| Site# | Site Name | Parameter Monitored | Site# | Site Name | Parameter Monitored | Site# | Site Name | Parameter Monitored |
| 01 | Margaretta | PM ₁₀ , SO ₂ , NO ₂ , NO _x , IT | 24 | South Charleston | SO ₂ , IT | 49 | St. Joseph | PM ₁₀ , PM _{10-LC} , PM _{2.5} , |
| 02 | Blair Street | PM ₁₀ , PM _{10-LC} , PM _{2.5} , PM _{2.5} (Spec), PMCoarse, O ₃ , SO ₂ , Pb, NO _y , NO, CO, BC, Carbonyls, Hexa | <u>Herculaneum Area</u> | | | | Pump Station | PMCoarse, BP, RH |
| | | Chromium, PAHs, VOCs, WS, WD, OT, IT, SR, BP, RH, | Site# | Site Name | Parameter Monitored | 50 | Savannah | O ₃ , WS, WD, IT |
| 03 | Branch Street | PM ₁₀ , PM _{10-LC} , PM _{2.5} , PMCoarse, WS, WD, OT, IT, BP, RH | 25 | Pevely North | Pb | 51 | Forest City, Exide | Pb-PM ₁₀ |
| 04 | Forest Park | PM _{10-LC} , PM _{2.5} , PMCoarse, NO ₂ CO, BC, WS, WD, OT, IT, SR, BP, RH, Prec | 26 | Pevely | Pb | <u>Acronym</u> | | |
| 05 | South Broadway | PM ₁₀ , PM _{10-LC} , PM _{2.5} , PMCoarse IT, BP, RH | 27 | Herculaneum, Sherman | Pb | PM ₁₀ | Particulate Matter (Diameter size ≤ 10 micrometer) | |
| 06 | Orchard Farm | O ₃ , IT | 28 | Herculaneum, | Pb | PM _{10-LC} | PM ₁₀ Local Condition | |
| 07 | West Alton | O ₃ , WS, WD, OT, IT, SR | 29 | Herculaneum, Mott Street | SO ₂ , Pb, WS, WD, IT | PM _{2.5} | Particulate Matter (Diameter size between 2.5 and 10 micrometer) | |
| 08 | Maryland Heights | O ₃ , WS, WD, OT, IT | 30 | Ursuline North | Pb | PMCoarse | Particulate Matter (Diameter size between 2.5 and 10 micrometer) | |
| 09 | Ladue | PM _{2.5} , WS, WD, OT, IT | <u>Old Lead Belt Area</u> | | | Spec | Speciation | |
| 10 | Pacific | O ₃ , WS, WD, OT, IT | Site# | Site Name | Parameter Monitor | SO ₂ | Sulfur Dioxide | |
| 11 | Oakville | PM ₁₀ , WS, WD, IT | 31 | Park Hills | Pb | NO ₂ | Nitrogen Dioxide | |
| 12 | Arnold West | PM _{10-LC} , PM _{2.5} , PM _{2.5} (Spec), PMCoarse, O ₃ , WS, WD, OT, IT, BP, RH | 32 | St. Joe State Park | Pb | NO | Nitric Oxide | |
| 13 | Foley | O ₃ , WS, WD, IT | <u>New Lead Belt Area</u> | | | NO _y | Reactive Oxides of Nitrogen | |
| <u>Kansas City Area</u> | | | Site# | Site Name | Parameter Monitored | NO _x | Oxides of Nitrogen | |
| Site# | Site Name | Parameter Monitored | 33 | Glover | Pb | CO | Carbon Monoxide | |
| 14 | Trimble | O ₃ , WS, WD, IT | 34 | Buick NE | Pb, SO ₂ , WS, WD, IT | Pb | Lead | |
| 15 | Watkins Mill | O ₃ , IT | 35 | Oates | Pb | BC | Black Carbon | |
| 16 | Liberty | PM _{10-LC} , PM _{2.5} , PM _{2.5} (Spec), PMCoarse, O ₃ , WS, WD, OT, IT | 36 | Bill's Creek | Pb | Prec | Precipitation | |
| 17 | Rocky Creek | SR, BP, RH | 37 | Fletcher | Pb | WS | Resultant Wind Speed | |
| 18 | Troost | O ₃ , WS, WD, IT | <u>Outstate Area</u> | | | WD | Resultant Wind Direction | |
| 19 | Front Street | PM ₁₀ | Site# | Site Name | Parameter Monitored | OT | Outside Temperature | |
| 20 | Richards | PM _{10-LC} , PM _{2.5} , PMCoarse, O ₃ , WS, WD, OT, IT, BP, RH | 38 | Alba | O ₃ , IT | IT | Indoor Temperature | |
| <u>Springfield Area</u> | | | 39 | Carthage | PM ₁₀ , WS, WD, IT | SR | Solar Radiation | |
| Site# | Site Name | Parameter Monitored | 40 | El Dorado Springs | PM _{10-LC} , PM _{2.5} , PMCoarse, O ₃ , WS, WD, OT, IT, BP, RH | BP | Barometer Pressure | |
| 21 | Fellows Lake | O ₃ , WS, WD, IT | 41 | Branson | O ₃ , WS, WD, IT | RH | Relative Humidity | |
| 22 | Hillcrest H. Sch. | O ₃ , IT | 42 | Hercules Glades | IMPROVE | IMPROVE | Interagency Monitoring of Protected Visual Environment (Regional Haze) | |
| 23 | Missouri State University | PM ₁₀ , PM _{10-LC} , PM _{2.5} , PMCoarse OT, IT, BP, RH | 43 | Mingo | IMPROVE | | | |
| | | | 44 | Farrar | O ₃ , WS, WD, IT | | | |
| | | | 45 | Bonne Terre | PM _{2.5} (Spec), O ₃ , WS, WD, SR, IT | | | |
| | | | 46 | New Bloomfield | O ₃ , WS, WD, IT | | | |
| | | | 47 | Finger Lakes | O ₃ , IT | | | |
| | | | 48 | Mark Twain State Park | PM ₁₀ , SO ₂ , O ₃ , WS, WD, IT | | | |

Notes:

- The acronym PM_{10-LC} is also commonly referred to as PM_{10c} when collected with a low volume sampler consistent with appendix O to Part 50. Where PM_{10-LC} means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers where the concentration is reported at local conditions of ambient temperature and barometric pressure). PM_{10-LC} is used in this document to describe any continuous or filter based PM₁₀ low volume measurement concentration that is reported at local conditions of ambient temperature and barometric pressure.
- PM₁₀ means particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers where the concentration is adjusted to EPA reference conditions of ambient temperature and barometric pressure (25 °C and 760 millimeters of mercury or STP).
- PMcoarse is also frequently referred to as PM_{10-2.5}.

PROPOSED CHANGES TO THE NETWORK

1. Lead Monitoring Network

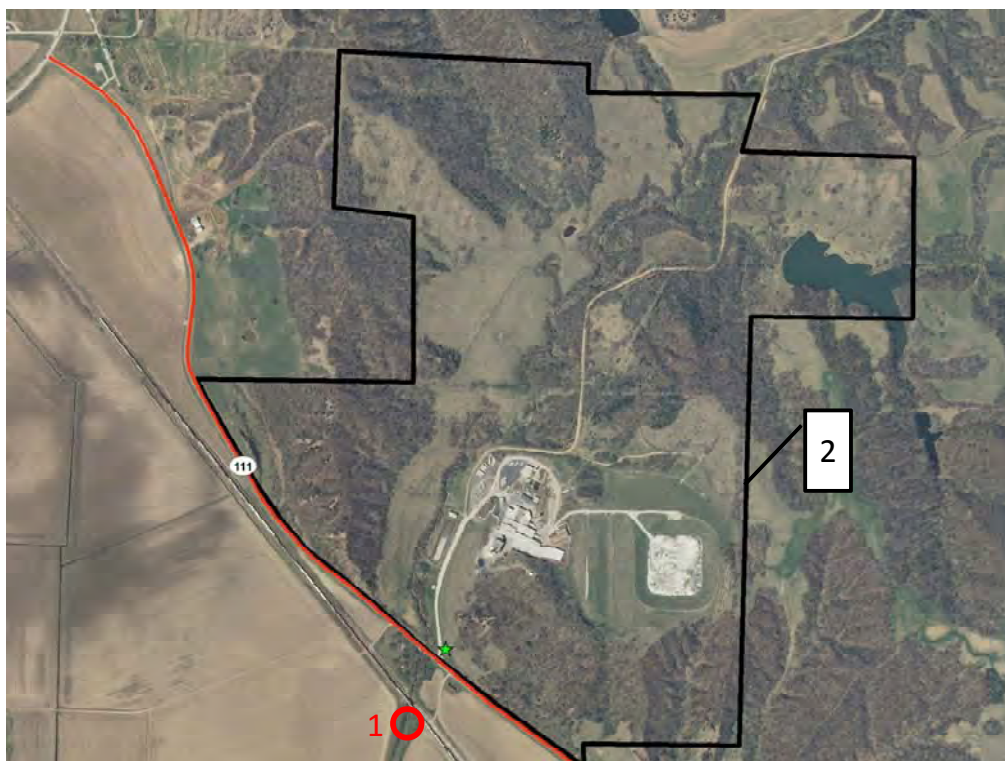
Changes to airborne lead monitoring requirements were published in the Federal Register: December 27, 2010 (Volume 75, Number 247). These new rules require a plan for monitoring lead sources emitting 0.50 tons per year or more, revised from the previous requirement for monitoring sources emitting one ton per year or more. Airports are specifically exempted from these requirements except for a special study being conducted at specific airports, none of which are in Missouri.

1.1 Forest City, Exide monitoring site.

The 2012 Monitoring Network Plan proposed resumption of lead monitoring at a location near the Exide Secondary Lead Smelter in Forest City MO. At the time that plan was proposed a specific location for this monitor had not been identified since this special purpose monitor is not required by the minimum monitoring requirements of 40 CFR Part 58. After reviewing property ownership records and historical monitoring data the department and EPA Region VII Staff agreed that monitoring should be resumed at the former site AQS# 29-087-0008 Schuylkill Metals-West (also known as the “levee” site). Other historical monitoring sites were located on the smelter property and concerns over whether or not these locations could be considered ambient air consistent with 40 CFR Part 50.1(e) led to the decision in consultation with EPA Region VII staff to resume monitoring at the levee site where historical (July 1996 through March 2000) ambient air lead concentrations were monitored above the level of the 2008 lead standard but well below the 1978 lead NAAQS before the facility implemented emission controls. Figure 1.1.1 identifies the monitoring site location and aerial view of the facility and surrounding area.

Department and EPA Region VII monitoring unit staff visited the site on December 14, 2011 and confirmed that the site meets the applicable middle scale lead monitoring criteria and the monitoring probe and monitoring path siting criteria of Appendix D and E to Part 58 respectively. The monitoring method will utilize the low volume PM_{10c} sampler and Pb- PM_{10} analysis will be performed by X-ray Fluorescence (XRF) utilizing specifications and procedures in 40 CFR part 50 Appendix Q. If a three month rolling average of airborne lead greater than $0.15 \mu g/m^3$ is monitored, the department will evaluate whether or not the low volume PM_{10c} sampler will be replaced or supplemented with a Pb-TSP sampler for a subsequent attainment demonstration.

Figure 1.1.1 Forest City Lead Monitoring Site



1. Forest City- Levee AQS# 29-087-0008 (formerly known as Schuylkill Metals-West)
 2. Property boundary (source MDNR HWP/RCRA/Operating Facilities Unit)
- ★ Facility main entrance

1.2 Discontinuation of the Corridon monitoring site.

On January 10, 2012 department received notice from the property owner of the Corridon monitoring site (AQS# 29-179-0003, 415 RR1, Ellington MO 63638) that they would like the state to remove the sampler. The Corridon site is a SLAMS site, but the Sweetwater mine/mill facility is no longer a source of lead emissions over 0.5 tons per year according to the 2010 NEI (0.29 tpy). Ambient air monitoring data obtained from the site have yielded three month rolling averages below 80% of the lead NAAQS and for all but one month the three month rolling averages have been at or below 20% of the NAAQS. Department staff discussed this with EPA Region VII Staff and determined that there is little technical justification in continuing NAAQS compliance monitoring in this area for these reasons. EPA Region VII staff approved discontinuing the monitor on March 13, 2012.

1.3 Discontinuation of the Webb City monitoring site.

The department received notice on August 1, 2011 from the property owner of the Webb City Lead ambient air monitoring site (AQS # 29-097-0005, 2424 N. Main, Webb City, MO 64870) that they would like sampler removed from the property in August 2011 for reasons related to selling the property.

The ambient air monitoring results from this site as of April 2011 indicate that the highest 3-month average ambient air concentration was $0.017 \mu\text{g}/\text{m}^3$ which is well below 80% of the $0.15 \mu\text{g}/\text{m}^3$ lead NAAQS. Email correspondence from the MDNR Hazardous Waste Program/Superfund Section on Friday, March 26, 2011 indicates that the remediation in the area near this monitor has been completed for some time. Given the low monitored ambient air lead concentrations and the continued MDNR Superfund oversight of the remediation in the Tri-State lead area, additional ambient air monitoring or relocating the monitor in this area appears to be unnecessary.

The Webb City site was approved as a Special Purpose Monitoring Station (SPM) in the October 2009 Missouri Lead Monitoring Network Plan (page 46) and consistent with 40 CFR Part 58.20 (f), the State of Missouri does not need prior approval from EPA to discontinue the site. However the department provided notice to EPA that the site will be discontinued by the end of August 2011 and this change would be addressed in the 2012 Monitoring Network Plan.

1.4 Doe Run “City Hall” Lead monitor

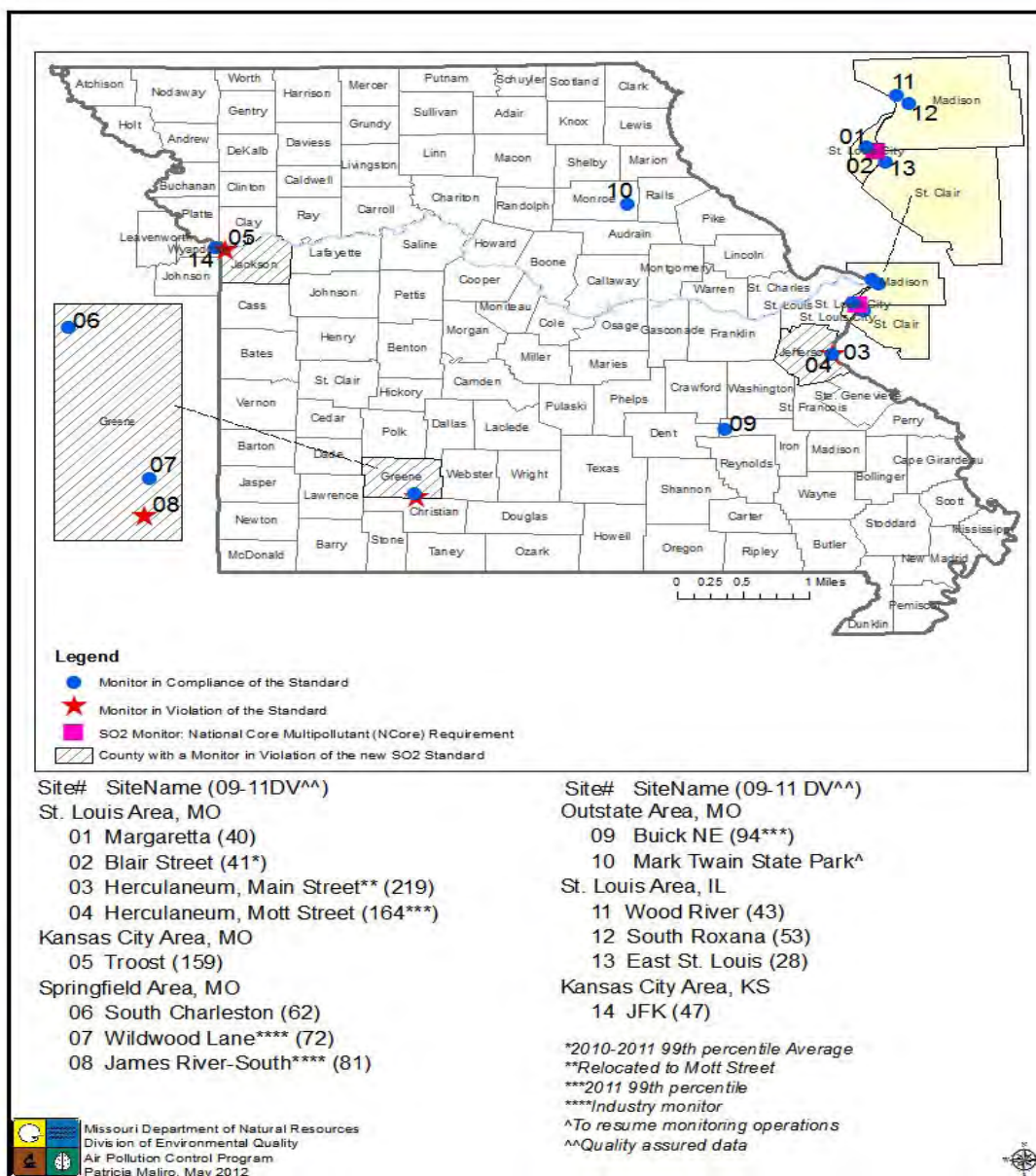
On December 13, 2011 The Doe Run Company moved their City Hall lead monitor to the MDNR Mott St. Lead monitoring site as a result of pending property transfer between the Doe Run Company and the City of Herculaneum.

2. Sulfur Dioxide Monitoring Network

On June 2, 2010, the US EPA revised the primary sulfur dioxide standard by establishing a 1-hour standard at the level of 75 parts per billion, or ppb. The EPA revoked the two previous primary standards of 140 ppb evaluated over 24-hrs and 30 ppb evaluated over an entire year.

SO₂ monitoring will be resumed at Mark Twain State Park (MTSP) as a special purpose monitor (SPM) to provide background concentrations which are needed to support the Prevention of Significant Deterioration (PSD) permitting program. No additional changes to the SO₂ network are proposed for 2013.

Missouri Statewide and the Surrounding SO₂ Monitoring Network, 2012 1-hour NAAQS = 75 ppb



3. National Air Toxics Trends Stations (NATTS), and other Non- Criteria Pollutant Special Purpose Monitoring.

3.1 National Air Toxics Trends Stations Monitoring:

In addition the regular NATTS monitoring at Blair St., the department and EPA staff are negotiating whether additional NATTS grant funds could be utilized to support collocating a near real time PM₁₀ Metals Monitor (Xact™ 620) at the NATTS site to increase understanding of the temporal variation of metals in the ambient air (particularly arsenic and lead) routinely measured by the time integrated 24-hr filter based PM₁₀ sampling at this site. This project will be useful in supplementing ambient air monitoring data objectives addressed in EPA's multi pollutant strategy.

3.2 Organic and Elemental Carbon Monitor Evaluation Project

EPA Office of Air Quality Planning and Standards contacted the EPA Regional Office and the state of Missouri about participating in a three year monitor evaluation study scheduled to begin in the summer/fall of 2011. As part of the project the EPA would provide the monitor and certain related components in exchange for the state providing in-kind staff time to operate and report data to the EPA Air Quality System (AQS) from the instrument. The proposed location for the study is the Blair St. Site since the site is currently part of the NCore, NATTS and Chemical Speciation monitoring programs and data from the Blair St. site is used extensively in various health and air pollution studies. Since elemental and organic carbon account for a significant amount of the particulate matter mass measured at this site at various times, understanding the temporal variation in carbon species relative to the 24-hr integrated filter based carbon data will be useful in understanding the local source contributions and diurnal variation in the carbon concentrations. This project will be useful in supplementing ambient air monitoring data objectives addressed in EPA's multi pollutant strategy.

Currently the preliminary near real-time monitoring data for this monitor is being reported each hour to the State of Missouri web page. EPA OAQPS and MDNR staff are working on the data format coding necessary to facilitate AQS and AirNow data reporting.

3.3 Black Carbon

As part of the condition of receiving one time section 103 Grant funds to implement some of the near-roadway monitoring network the department will conduct special purpose PM_{2.5} Black Carbon monitoring at the Forest Park near roadway NO₂ site using an Aethalometer. Black Carbon Monitoring at the other near roadway sites is being evaluated contingent on available funding.

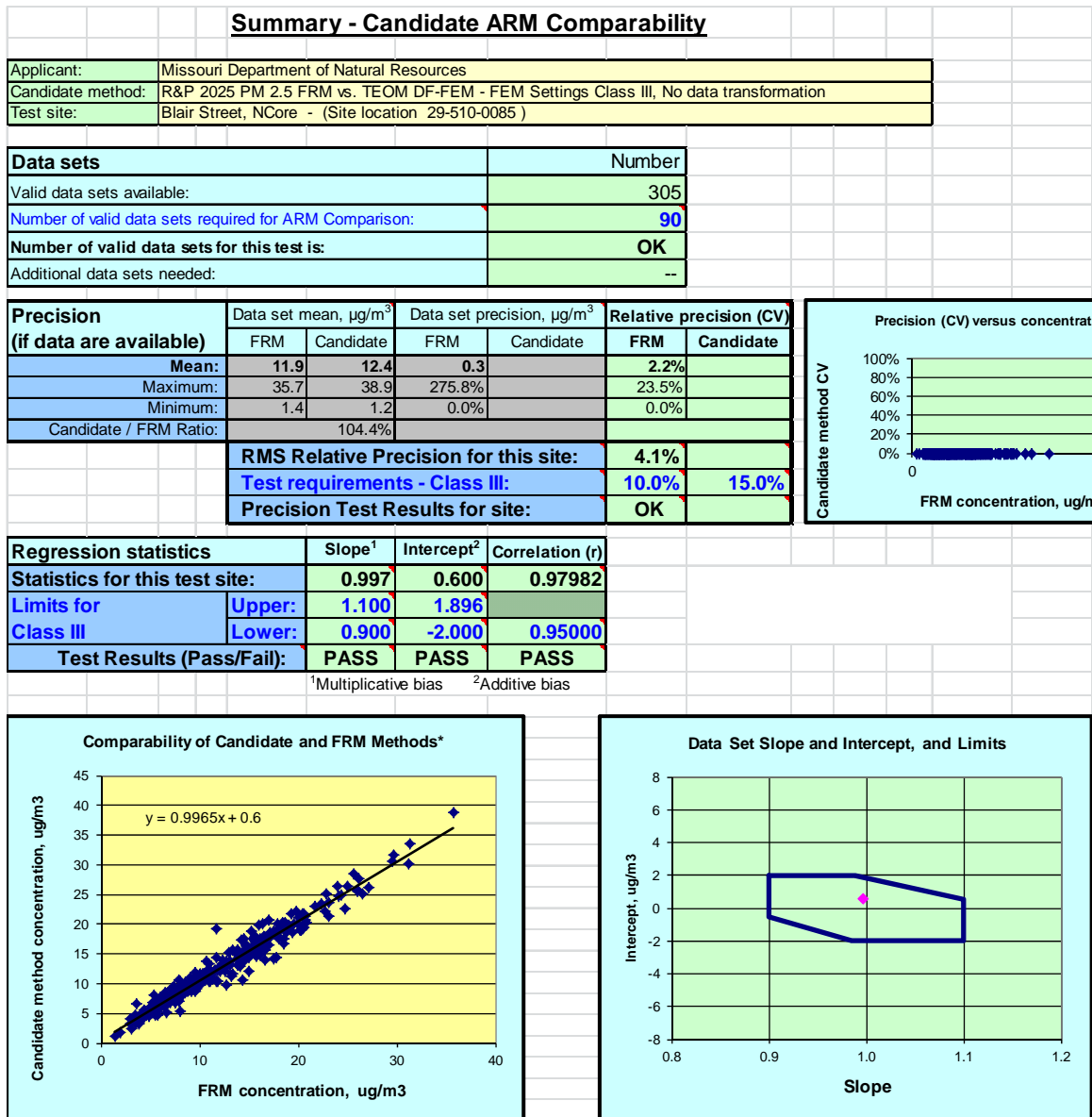
4. PM_{2.5} Monitoring Network

The current PM_{2.5} 103 Grant Work plan (April 2012 – March 2013) includes purchasing four new TEOM 1405-DF continuous PM_{2.5} monitors and four new data loggers to upgrade aging TEOM-FDMS-8500C monitors at Troost and Ladue. One new monitor will be used to satisfy the network FEM/FEM collocation requirements of Part 58 Appendix A and the remaining monitor will be used as a network spare. One additional Special Purpose Micro scale PM_{2.5} monitor is proposed for the Forest Park near-roadway monitoring site.

The PM_{10c} (local conditions of ambient temperature and barometric pressure) channel and PMcoarse (PM_{10-2.5}) channel from the TEOM-1405-DF will be reported for each site as a special purpose monitor since they are available simultaneously with the PM_{2.5} FEM channel but neither is currently designated as a Federal Equivalent Method. This will provide more temporal and special coverage for the various fractions of particulate matter at the PM_{2.5} monitoring sites in the network. The manufacturer of the TEOM-1405-DF is in the process of obtaining a Federal Equivalent Method designation for both the PM₁₀ and PMcoarse channels on the TEOM-1405-DF monitor.

Network PM_{2.5} collocated FRM requirements are satisfied at Blair St. NCore site in St. Louis and the Troost site in Kansas City. The following page reports the FRM/Federal Equivalent Method Comparability statistics (Class III performance criteria of 40 CFR Part 53) for one year of the TEOM-1405-DF EQPM-0609-182 operating at the Blair St. St. Louis NCore site.

Class III Performance Criteria of 40 CFR Part 53
 Blair St. St. Louis Air Quality System # 29-510-0085
 TEOM-1405-DF, EQPM-0609-182 (PM_{2.5})
 January 6, 2011 through December 31, 2011
 Preliminary State Data Using All Daily Collocated Sample Pairs



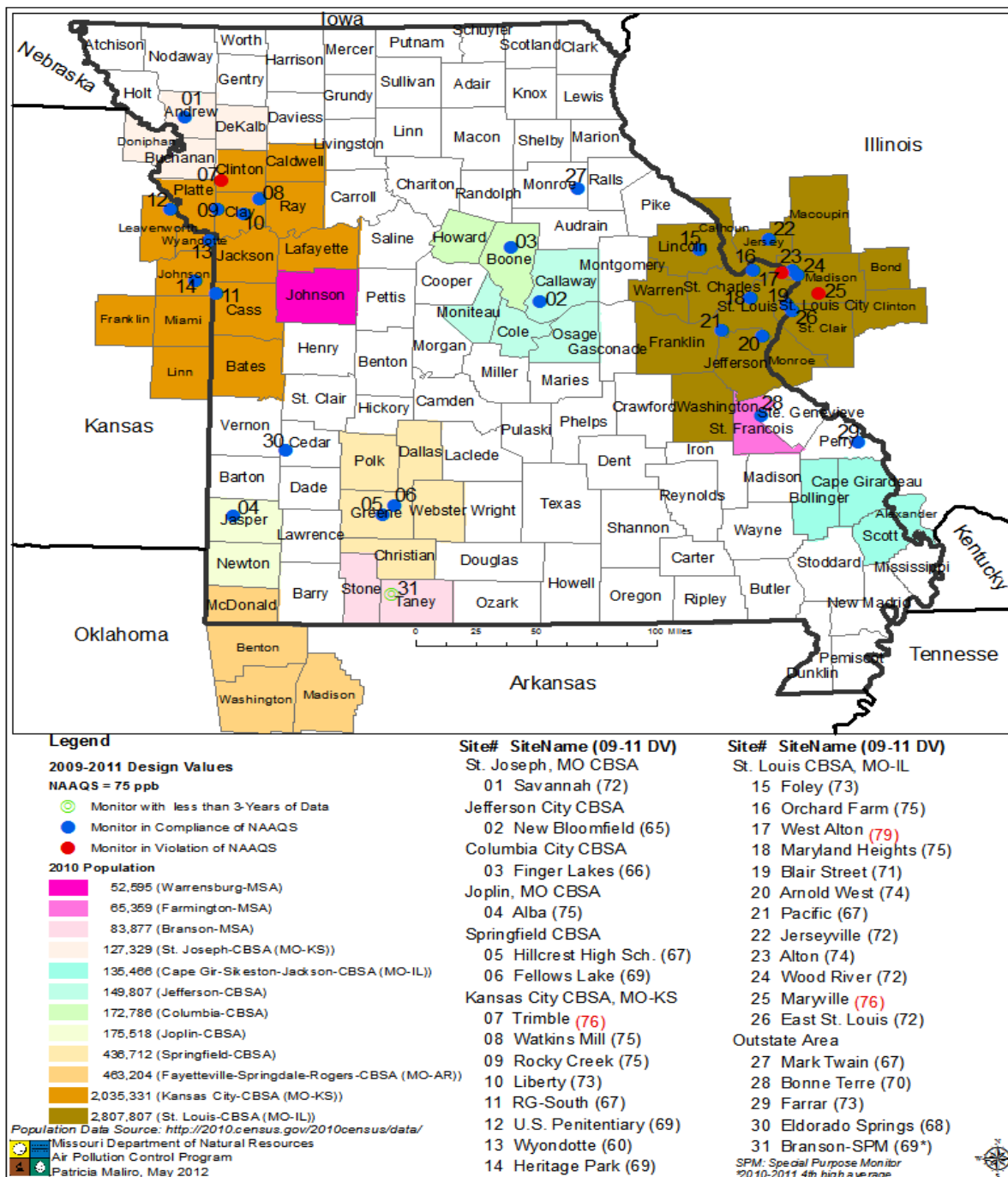
REVISED PM_{2.5} MONITORING NETWORK

| Site | Schedule* | Type | Agency | NAAQS |
|---|-----------|------------------|-------------------------|---|
| St. Louis | | | | |
| 1. Blair St. | 1 | FRM | ESP | 24 hr & Annual, NCore PMcoarse |
| | 6 | Collocated | ESP | Doubles as PMcoarse collocated sampler |
| | 3 | Speciation | ESP | |
| | H | TEOM-1405-DF FEM | ESP | AQI, NCore PM10-2.5 continuous |
| 2. Branch St. | H | TEOM-1405-DF FEM | ESP | 24 hr & AQI (Middle Scale Monitor) |
| 3. South Broadway | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI |
| 4. Ladue | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI |
| 5. Arnold West | 3 | Speciation | ESP | |
| | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI |
| 6. Forest Park (near-roadway) | H | TEOM-1405-DF FEM | ESP | 24 hr & AQI (Micro Scale Monitor) |
| Kansas City | | | | |
| 7. Liberty | 3 | Speciation | ESP | |
| | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI |
| 8. Troost | 6 | Collocated FRM | ESP | 24 hr & Annual (Quality Assurance) |
| | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI |
| 9. Richards-Gebaur South | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI |
| Springfield | | | | |
| 10. MSU | H | TEOM-1405-DF FEM | ESP | AQI, PM10-2.5 continuous |
| St. Joseph | | | | |
| 11. Pump Station | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI, PM10-2.5 continuous |
| | H | TEOM-1405-DF FEM | ESP | Collocated FEM-PM2.5 |
| Outstate | | | | |
| 12. El Dorado Springs | H | TEOM-1405-DF FEM | ESP | 24 hr & Annual/AQI |
| | 3 | IMPROVE | ESP | |
| 13. Bonne Terre | 3 | Speciation | ESP | |
| 14. Mingo | 3 | IMPROVE | Fish & Wildlife Service | |
| 15. Hercules Glades | 3 | IMPROVE | Forest Service | |
| * 1 = Everyday sampling; 3 = Every third day; 6 = Every sixth day; H = Continuous monitoring, hourly data reported. | | | | |

5. Ozone Monitoring Network

There are no plan changes to the ozone monitoring network, however ozone monitoring will be conducted all year at the Mark Twain State Park (MTSP) site to collect ozone background data need for PSD modeling projects. The current monitoring network is based on the current ozone standard and ground-level ozone air quality monitoring network design requirements.

Missouri Statewide Ozone (O₃) Monitoring Network, 2012 2008 Primary 8-hour NAAQS = 75 Parts per Billion (ppb)



6. PM₁₀ Monitoring Network

6.1 Method Changes

The filter based PM₁₀ monitoring at MSU and Front St. will be replaced by the continuous R & P TEOM® 1400, 1400a EQPM-1090-079 PM₁₀ FEM monitor to increase the temporal availability of PM₁₀ NAAQS compliance monitoring in these areas. Hourly PM₁₀ data will provide more data for particulate matter episode analysis.

6.2 Hall St. PM₁₀ site AQS #29-510-0088 Discontinued

Several property access agreements needed to be addressed as a result of the transition of Local Air Agency ambient air monitoring activities to the State of Missouri. The State of Missouri was not able to negotiate an access agreement with the property owner of the Hall St site and Monitoring was discontinued on April 24, 2012 at the request of the property owner.

Department staff attempted to locate another suitable monitoring site just north of this location at an Ameren UE substation, but safety requirements at this location did not allow for leasing of the space. Other nearby candidate monitoring sites either do not meet the applicable siting criteria of 40 CFR Part 58 or stable property ownership and the potential for property vandalism appears to be a concern for successful long term monitoring. For these reasons the department requests that EPA review the following criteria and approve permanently discontinuing the site.

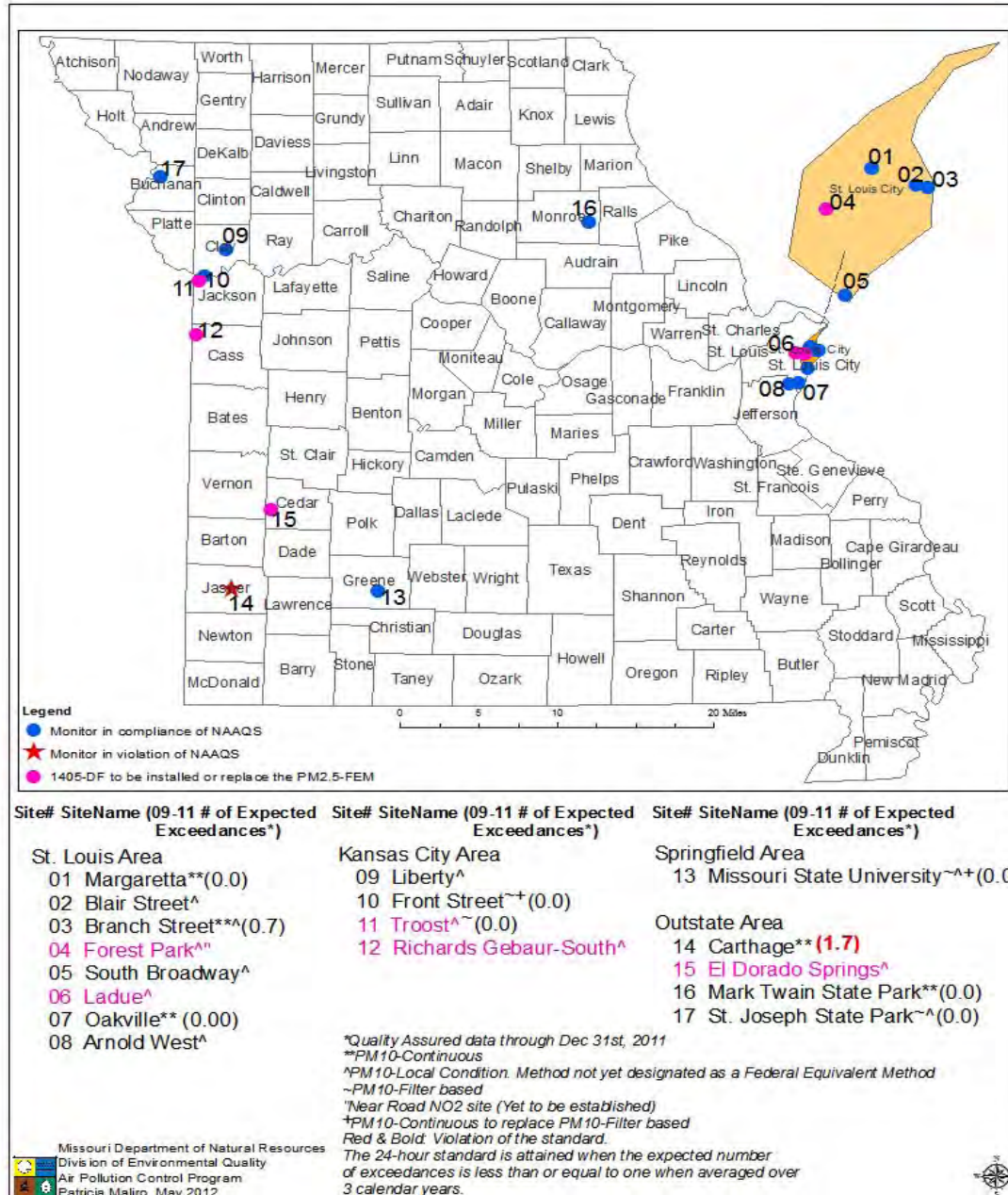
50 CFR Part 58.14 identifies conditions under which SLAMS monitors may be approved by the EPA Regional Administrator to be discontinued. The PM₁₀ NAAQS is based on an Expected Exceedance form consistent with Appendix K to Part 50.

- The site is not currently in violation of the PM₁₀ NAAQS.
- The site has not monitored an exceedance of the PM₁₀ standard since March 12, 2007.
- The site is not required in any PM₁₀ Attainment or Maintenance plan.
- Another PM₁₀ site, Branch Street AQS# 29-510-0093, is monitoring a higher PM₁₀ design value and is located in the same county.
- The minimum monitoring requirements cited in 40 CFR Part 58 Appendix D for PM₁₀ in the St. Louis CBSA is still satisfied by the total number (six) of PM₁₀ monitors remaining in the St. Louis MO/IL CBSA after the site is discontinued.

As discussed in Section 4, the TEOM-1405-DF monitor has the capability of reporting the PM_{10c} (PM₁₀ at local conditions of ambient temperature and barometric pressure) along with the FEM PM_{2.5} measurements. Once the TEOM 1405-DF obtains a PM₁₀ FEM designation, the number of Special Purpose NAAQS comparable continuous PM₁₀ monitors will increase in the St. Louis area by four (4) sites (Blair St., Ladue, South Broadway and the new Forest Park Near Roadway site) which will bolster the count toward the PM₁₀ minimum monitoring requirements in this CBSA to a total count of ten (10) monitors.

For these reasons the department requests that the EPA Regional Administrator approve permanently discontinuing the Hall St. PM₁₀ monitoring site because the discontinuance does not compromise the data collection needed for implementation of the PM₁₀ NAAQS and the requirements of 40 CFR Part 58, Appendix D continue to be met.

Missouri Statewide PM₁₀ Monitoring Network, 2012 24-hour NAAQS = 150 Micrograms per Cubic Meter (µg/m³)

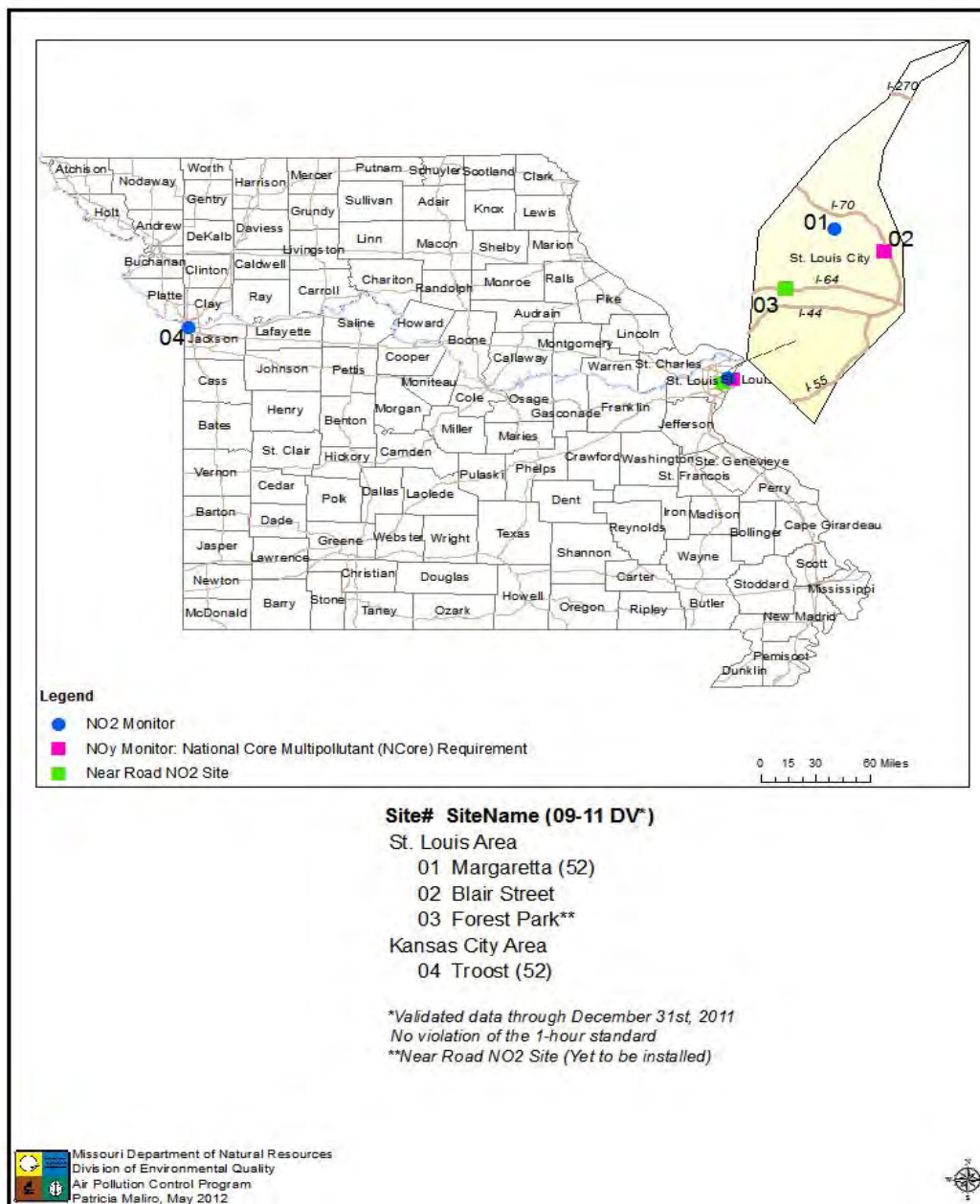


7. Nitrogen Dioxide (NO₂) Monitoring Network

The department intends to add one near-roadway NO₂ monitor to the network at the Forest Park I-40/64 near-roadway monitoring site by January 1, 2013. The Community-wide monitoring network requirement is satisfied by the existing Troost and Margaretta monitoring sites.

7.1 NO₂ SLAMS Network

Missouri Statewide Nitrogen Dioxide (NO₂) Monitoring Network, 2012 1-hour NAAQS = 100 ppb



7.2 NO₂ Near-Roadway Monitoring

7.2.1 Near-Road Monitoring Requirements

NO₂: The final rule revising the NAAQS to add the 1-hour standard of 100 ppb (3-year average of annual 98th percentile), signed 1/22/2010 and published 2/9/2010 requires near-road NO₂ monitoring at two sites in the St. Louis CBSA (population 2.8 million) and one site in the Kansas City CBSA (population 2.0 million) (based on population and traffic count). Sites are to be identified in the 7/2012 air monitoring plan and begin operation by 1/1/2013. Because of resource and other constraints, EPA staff have, over the last several months, proposed a relaxation of this schedule. EPA staff have recently communicated that this schedule change would likely be included in a rule change that would require the first St. Louis area near-road site to begin operation in January 2014, the Kansas City area site in January 2014, and the second St. Louis area site January 2015. Based in part on communication with EPA Region VII staff, the department intends to establish the first St. Louis area site in January 2013, the Kansas City area site in January 2014, and the second St. Louis area site in January 2015. This schedule is subject to availability of funds.

CO: The final rule continuing the NAAQS, signed 8/12/2011 and published 8/31/2011 requires near-road CO monitoring (collocated with NO₂ sites) at one site in the St. Louis CBSA by 1/2015 and one site in the Kansas City CBSA by 1/2017. The department intends to establish CO monitoring at the same time as NO₂ monitoring, as described above.

Near-road monitoring stations must be within 50 meters (164 feet) of target road segments to measure expected peak concentrations, and should be within about 20 meters of the roadway. Microscale near-road NO₂ monitors must have inlets between 2 and 7 meters above ground level. Microscale near-road CO monitors must have inlets 3±½ meters above ground level.

EPA Guidance

EPA issued drafts of a Near-road NO₂ Monitoring Technical Assistance Document (TAD) on 8/11/2011 and 12/21/2011. The final TAD is expected to be released in 2012. The TAD is available online at <http://www.epa.gov/ttn/amtic/nearroad.html>. The TAD includes recommendations on site selection that were used in the analysis described below.

7.2.2 Analysis and Site Selection for the St. Louis Area

Traffic counts (annual average daily traffic; AADT) for major highway segments in Missouri are available on a Missouri Department of Transportation (MODOT) website at <http://www.modot.mo.gov/safety/trafficvolumemaps.htm>. Truck volumes are also indicated for some, but not all highway segments. The maximum 2010 AADT in the St. Louis area is 183,813.

The TAD recommends ranking segments by AADT and also by weighted AADT, where heavy-duty vehicles are weighted a factor of 10 times higher. Table 7.2-1 lists highway segments with

AADT greater than 100,000 (and a few additional segments included for continuity). The numbers in the left column are arbitrary location identifiers. Table 7.2-2 adds weighted AADT using truck volumes from the MODOT maps where available and using interpolated or extrapolated truck volumes otherwise.

For the St. Louis area, as shown in Tables 7.2-3 and 7.2-4, the eight segments with highest AADT were the same as the eight segments with the highest weighted AADT.

Figure 7.2-1 shows the locations of these eight segments superimposed on a portion of one of the MODOT AADT maps. The four segments with the highest AADT, unweighted or weighted (no. 39, 40, 41, and 42), are on I-270 between Page Avenue (highway 364) to the north and I-44 to the south. Two of the segments are on I-64 between I-170 to the west and Kingshighway Boulevard to the east, adjacent to the southern boundary of Forest Park. The remaining two segments are on I-70 just west of I-270, and on I-270 between highway 370 on the west and Lindbergh Boulevard on the east.

Figure 7.2-2 shows a wind rose for recent multiple years (2002 to 2006) at the St. Louis airport. The wind rose suggests that a near-road monitoring site would, in general, be best located in a direction from north to east of a target roadway.

Table 7.2-1.

| St. Louis Area Traffic Counts > 100,000 AADT (2010) | | | |
|---|--------------------|-----------------|-------------|
| Ranked by AADT | | | |
| No. | Highway | Location | AADT |
| 41 | I270 (n to s) | s of 64 | 183,813 |
| 40 | I270 (n to s) | n of 64 | 176,384 |
| 39 | I270 (n to s) | | 175,022 |
| 42 | I270 (n to s) | n of 44 | 174,973 |
| 16 | US40/I64 (w to e) | e of 170 | 173,236 |
| 36 | I270 (n to s) | e of 370 | 166,108 |
| 6 | I70 (west to east) | w of 270 | 161,338 |
| 17 | US40/I64 (w to e) | | 159,326 |
| 38 | I270 (n to s) | s of 70 | 157,483 |
| 43 | I270 (n to s) | s of 44 | 155,464 |
| 5 | I70 (west to east) | | 148,056 |
| 14 | US40/I64 (w to e) | e of 67 | 145,940 |
| 34 | I270 (n to s) | e of 170 | 141,577 |
| 22 | I44 (w to e) | | 141,541 |
| 8 | I70 (west to east) | e of 67 | 140,853 |
| 21 | I44 (w to e) | | 138,031 |
| 15 | US40/I64 (w to e) | w of 170 | 137,403 |
| 2 | I70 (west to east) | e of 79 | 135,074 |
| 9 | I70 (west to east) | e of 170 | 135,061 |
| 20 | I44 (w to e) | | 134,961 |
| 4 | I70 (west to east) | e of 94 | 130,566 |
| 13 | US40/I64 (w to e) | e of 270 | 129,909 |
| 35 | I270 (n to s) | w of 170 | 126,394 |
| 37 | I270 (n to s) | w of 370 | 123,378 |
| 7 | I70 (west to east) | e of 270 | 122,444 |
| 27 | I55 (n to s) | s of 270 | 121,525 |
| 29 | I170 (n to s) | s of 70 | 121,164 |
| 10 | I70 (west to east) | | 118,591 |
| 3 | I70 (west to east) | e of 370 | 116,010 |
| 1 | I70 (west to east) | w of 79 | 115,967 |
| 32 | I170 (n to s) | n of 64 | 115,797 |
| 12 | US40/I64 (w to e) | w of 270 | 113,732 |
| 26 | I55 (n to s) | n of 270 | 112,984 |
| 31 | I170 (n to s) | | 109,321 |
| 33 | I270 (n to s) | w of 367 | 108,774 |
| 30 | I170 (n to s) | | 106,961 |
| 28 | I55 (n to s) | | 101,882 |
| 19 | I44 (w to e) | e of 61 | 100,841 |
| 23 | I55 (n to s) | s of 64 | 100,615 |
| 11 | I70 (west to east) | | 95,690 |
| 24 | I55 (n to s) | s of 44 | 91,910 |
| 18 | US40/I64 (w to e) | | 91,109 |
| 25 | I55 (n to s) | | 86,323 |

Table 7.2-2.

| St. Louis Area Traffic Counts > 100,000 AADT (2010) (as entered/unranked) | | | | | | | |
|---|--------------------|----------|---------|------------|-------------|---------|----------|
| No. | Highway | Location | AADT | Truck AADT | Truck/Total | est T/T | adj AADT |
| 1 | I70 (west to east) | w of 79 | 115,967 | | | 0.117 | 238,137 |
| 2 | I70 (west to east) | e of 79 | 135,074 | 15,811 | 0.117 | 0.117 | 277,373 |
| 3 | I70 (west to east) | e of 370 | 116,010 | | | 0.137 | 258,658 |
| 4 | I70 (west to east) | e of 94 | 130,566 | | | 0.137 | 291,112 |
| 5 | I70 (west to east) | | 148,056 | | | 0.137 | 330,108 |
| 6 | I70 (west to east) | w of 270 | 161,338 | | | 0.137 | 359,722 |
| 7 | I70 (west to east) | e of 270 | 122,444 | 19,125 | 0.156 | 0.156 | 294,569 |
| 8 | I70 (west to east) | e of 67 | 140,853 | 17,260 | 0.123 | 0.123 | 296,193 |
| 9 | I70 (west to east) | e of 170 | 135,061 | | | 0.161 | 330,317 |
| 10 | I70 (west to east) | | 118,591 | | | 0.146 | 274,868 |
| 11 | I70 (west to east) | | 95,690 | 19,016 | 0.199 | 0.199 | 266,834 |
| 12 | US40/I64 (w to e) | w of 270 | 113,732 | 10,704 | 0.094 | 0.094 | 210,068 |
| 13 | US40/I64 (w to e) | e of 270 | 129,909 | | | 0.107 | 254,972 |
| 14 | US40/I64 (w to e) | e of 67 | 145,940 | 17,486 | 0.120 | 0.120 | 303,314 |
| 15 | US40/I64 (w to e) | w of 170 | 137,403 | | | 0.135 | 304,829 |
| 16 | US40/I64 (w to e) | e of 170 | 173,236 | 26,152 | 0.151 | 0.151 | 408,604 |
| 17 | US40/I64 (w to e) | | 159,326 | | | 0.151 | 375,795 |
| 18 | US40/I64 (w to e) | | 91,109 | | | 0.151 | 214,895 |
| 19 | I44 (w to e) | e of 61 | 100,841 | | | 0.117 | 207,075 |
| 20 | I44 (w to e) | | 134,961 | | | 0.117 | 277,140 |
| 21 | I44 (w to e) | | 138,031 | 16,157 | 0.117 | 0.117 | 283,444 |
| 22 | I44 (w to e) | | 141,541 | | | 0.117 | 290,652 |
| 23 | I55 (n to s) | s of 64 | 100,615 | | | 0.131 | 219,346 |
| 24 | I55 (n to s) | s of 44 | 91,910 | 12,051 | 0.131 | 0.131 | 200,369 |
| 25 | I55 (n to s) | | 86,323 | | | 0.131 | 188,189 |
| 26 | I55 (n to s) | n of 270 | 112,984 | | | 0.131 | 246,312 |
| 27 | I55 (n to s) | s of 270 | 121,525 | | | 0.131 | 264,931 |
| 28 | I55 (n to s) | | 101,882 | | | 0.131 | 222,109 |
| 29 | I170 (n to s) | s of 70 | 121,164 | | | 0.137 | 270,287 |
| 30 | I170 (n to s) | | 106,961 | | | 0.137 | 238,604 |
| 31 | I170 (n to s) | | 109,321 | | | 0.137 | 243,868 |
| 32 | I170 (n to s) | n of 64 | 115,797 | | | 0.137 | 258,315 |
| 33 | I270 (n to s) | w of 367 | 108,774 | 20,059 | 0.184 | 0.184 | 289,305 |
| 34 | I270 (n to s) | e of 170 | 141,577 | | | 0.151 | 333,626 |
| 35 | I270 (n to s) | w of 170 | 126,394 | | | 0.151 | 297,848 |
| 36 | I270 (n to s) | e of 370 | 166,108 | | | 0.151 | 391,434 |
| 37 | I270 (n to s) | w of 370 | 123,378 | | | 0.151 | 290,740 |
| 38 | I270 (n to s) | s of 70 | 157,483 | 18,431 | 0.117 | 0.117 | 323,362 |
| 39 | I270 (n to s) | | 175,022 | | | 0.153 | 416,802 |
| 40 | I270 (n to s) | n of 64 | 176,384 | | | 0.153 | 420,046 |
| 41 | I270 (n to s) | s of 64 | 183,813 | | | 0.153 | 437,738 |
| 42 | I270 (n to s) | n of 44 | 174,973 | 33,236 | 0.190 | 0.190 | 474,097 |
| 43 | I270 (n to s) | s of 44 | 155,464 | 18,198 | 0.117 | 0.117 | 319,246 |
| | | | | average | 0.140 | 0.138 | |

Table 7.2-3.

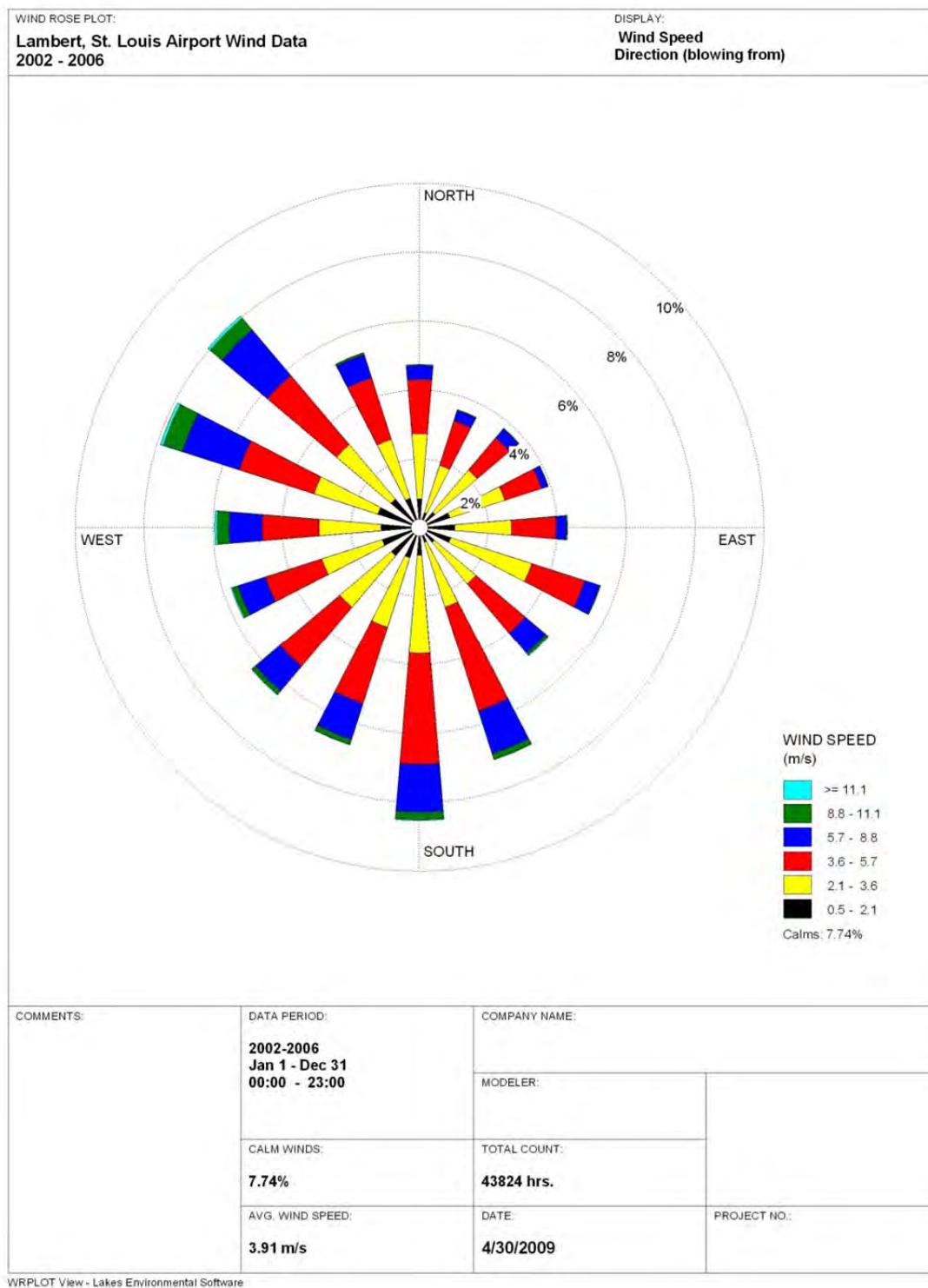
| St. Louis Area Traffic Counts > 100,000 AADT (2010) | | | | |
|---|--------------------|----------|---------|--|
| Ranked by AADT | | | | |
| No. | Highway | Location | AADT | |
| 41 | I270 (n to s) | s of 64 | 183,813 | |
| 40 | I270 (n to s) | n of 64 | 176,384 | |
| 39 | I270 (n to s) | | 175,022 | |
| 42 | I270 (n to s) | n of 44 | 174,973 | |
| 16 | US40/I64 (w to e) | e of 170 | 173,236 | |
| 36 | I270 (n to s) | e of 370 | 166,108 | |
| 6 | I70 (west to east) | w of 270 | 161,338 | |
| 17 | US40/I64 (w to e) | | 159,326 | |

Table 7.2-4.

| St. Louis Area Traffic Counts > 100,000 AADT (2010) | | | | |
|---|--------------------|----------|---------|-----------|
| Ranked by adjusted AADT, trucks =14% (average) | | | | |
| No. | Highway | Location | AADT | Adj. AADT |
| 41 | I270 (n to s) | s of 64 | 183,813 | 415,417 |
| 40 | I270 (n to s) | n of 64 | 176,384 | 398,628 |
| 39 | I270 (n to s) | | 175,022 | 395,550 |
| 42 | I270 (n to s) | n of 44 | 174,973 | 395,439 |
| 16 | US40/I64 (w to e) | e of 170 | 173,236 | 391,513 |
| 36 | I270 (n to s) | e of 370 | 166,108 | 375,404 |
| 6 | I70 (west to east) | w of 270 | 161,338 | 364,624 |
| 17 | US40/I64 (w to e) | | 159,326 | 360,077 |

[illegible]

Figure 7.2-2.



Field Evaluation and Description of Potential St. Louis Area Monitoring Sites

On December 22, 2011 Missouri Department of Natural Resources Air Pollution Control Program (APCP) and Environmental Services Program (ESP) staff visited potential monitoring sites in the vicinity of the highway segments identified above. On February 15, 2012, APCP staff revisited some of the sites with Mr. Leland Grooms, Air Monitoring Team Leader for EPA Region VII. This section presents discussion of the suitability of the sites.

I-270 north of I-44: The area near I-270 just north of I-244 is heavily wooded. It is also somewhat hilly. No suitable monitoring sites were identified in this area.

I-270 north of I-64: The Saint Johns Mercy Medical Center complex is on McCauley Drive in Creve Coeur, adjacent to (east of) I-270 and about ½ mile north of I-64. The area between McCauley Drive and I-270 is at the same level as the roadway, and would meet siting criteria for a near-road monitoring station. This location is in a desirable direction (E) from and in close proximity (25 meters) to the section of highway with the highest AADT in the St. Louis area, and also not far (about 1 kilometer) from another highway with high AADT. The potential for congestion may be less than that for the Forest Park area because of the higher number of traffic lanes. It may be difficult to secure permission to locate an air monitoring station in the landscaped area adjacent to the highway. The division between MODOT and hospital property is not obvious. This location would provide some indication of the exposure of a sensitive population because of its proximity to the medical center and to nearby residential areas.

I-64 between I-270 and Kingshighway Boulevard (Forest Park): Forest Park in St. Louis is bounded by Skinker Boulevard on the west, Lindell Boulevard on the north, Kingshighway Boulevard on the east, and I-64 on the south. Two locations near the southeast corner of the park were identified that would meet siting criteria, adjacent to the St. Louis Mounted Police barn near the planetarium, and near the greenhouses behind park office buildings (see Figures 7.2-3). This location is in the desired direction (N) from and in close proximity (20 to 25 meters) to a highway with high AADT and high potential for congestion. This location would provide some indication of population exposure, since there is a jogging or biking trail along the park boundary adjacent to the highway, and hospital complexes to the east of Forest Park.

I-70 west of I-270: Rider Trail S. and Hollenberg Drive (same street, changes name) is roughly parallel to and north of I-70 in Bridgeton between I-270 to the east and Earth City Expressway to the west. Two locations in this area were identified that would meet siting criteria, near the southeast corner of the CAPS Inc. building, and across the street from the Marriott Courtyard. Either of these locations is in a desirable direction (N) from and in relatively close proximity (20 to 30 meters) to a highway segment with a relatively high AADT but less potential for congestion than the Forest Park location. The difficulty of securing permission to locate an air monitoring station is unknown. The area near this location is primarily commercial and residential, so would provide some indication of population exposure.

I-270 east of Highway 370 and west of Lindbergh Boulevard: Two locations in this general area were identified that would meet siting criteria. One area is in Hazelwood at the end of Brookes Drive on the south side of I-270, adjacent to Bommarito Volkswagen and Brookes Park. This location is in a non-optimal direction (S) from a highway segment with high AADT and potential

congestion, but not as close (30 meters) to the highway as some of the other sites evaluated. The difficulty of securing permission to locate an air monitoring station is unknown. The area near this location is primarily commercial and residential, so would provide some indication of population exposure.

The second area is on the north side of I-270, southeast of the Prairie Commons Branch Library, north of Dunn Road, east of Utz Lane, southwest of Hazelwest Drive, in either Hazelwood or an unincorporated area of St. Louis County. The location near the library is in a desirable direction (N) from a highway segment with high AADT and potential congestion, but not as close (35 meters) to the highway as some of the other sites evaluated because of a frontage road between the site and the highway. The difficulty of securing permission to locate an air monitoring station might be less than at some sites if the location is on the library property. The area near this location is primarily commercial and residential, so would provide some indication of population exposure.

St. Louis Area Site Ranking

Some of the characteristics of each location are summarized in Table 7.2-5, which lists the locations in order of ranking. The table includes an indicator of the potential for congestion at each location, the ratio of AADT to number of traffic lanes (as suggested in the TAD).

As discussed above, truck counts are not available for all road segments and so were estimated by interpolation or extrapolation. Unfortunately, none of the road segments immediately adjacent to the locations of interest have truck counts, but only estimated truck fractions. The estimated fractions are not different enough to discriminate between locations on that basis.

An additional consideration, not shown in the table, is the potential likelihood of securing permission from landowners for location of an air monitoring station.

Based on AADT, congestion, distance and direction from the roadway, and likelihood of securing permission to locate a monitoring station, the locations are ranked in approximately the order listed in Table 7.2-5. Based in part on the February 15, 2012 site visits, EPA Region VII staff generally approved all of the sites and identified the site in Forest Park as first choice, consistent with this evaluation.

Table 7.2-5.

| Summary and Approximate Ranking of Sites | | | | | | | |
|--|---------|---------|-------|------------|--------------------------|---------------------------------|------------------------|
| Location | Highway | AADT | Lanes | AADT/Lanes | Estimated Truck Fraction | Approx. Distance to Roadway (m) | Direction from Roadway |
| Forest Park | 64 | 159,326 | 8 | 19,916 | 0.151 | 20-25 | N |
| Hospital | 270 | 176,384 | 12 | 14,699 | 0.153 | 25 | E |
| CAPS/Courtyard | 70 | 161,338 | 11 | 14,667 | 0.137 | 20-30 | N |
| Library | 270 | 166,108 | 8 | 20,764 | 0.151 | 35 | N |
| Brookes | 270 | 166,108 | 9 | 18,456 | 0.151 | 30 | S |

Selection of First St. Louis Area Site

ESP staff contacted St. Louis City Parks staff by telephone in late February 2012 and discussed the possibility of locating an air monitoring site in Forest Park adjacent to Interstate 64. On March 1, 2012, ESP staff met with St. Louis City Parks staff in Forest Park. During that visit, a specific site to the west of the greenhouses was identified which is acceptable to City Parks staff (see Figures 7.2-4 and 7.2-5). The monitoring site is elevated a few feet above the level of the roadway, but not enough to be a concern. The 10-meter meteorological instrument tower may need to be located at a slightly greater distance from the roadway than the air monitoring shelter in order to keep it away from power lines. Based on the analysis and site visits described above, APCP recommends the Forest Park site identified during the March 1, 2012 as the first near-road monitoring site for the St. Louis area. Agreement for use of this site has been negotiated between Missouri Department of Natural Resources and St. Louis City, and operation of this site is expected to begin January 2013.

Second St. Louis Area Site

The second St. Louis area site, which will begin operation in January 2014, will probably be selected from one of the candidate sites identified above or at least from the areas identified above. One consideration will be selection of a site with different traffic patterns and/or a different mix of vehicles than the Forest Park site.

Figure 7.2-3. Aerial photographs of Forest Park in St. Louis and I-64 (along the southern edge of the park). The lower photograph shows the identified location for an air monitoring station near the greenhouses in Forest Park. The arrow extends from the area of interest in one photograph to the same area in the other photograph.



Figure 7.2-4. Looking east along Interstate 64. The monitoring site will be on the paved area inside the fence to the left. The jogging or biking path along the park perimeter extends straight ahead, and Interstate 64 is to the right.



Figure 7.2-5. Looking south across Interstate 64. The monitoring site will be inside the fence near where the two persons are standing.



7.2.3 Analysis for the Kansas City Area

Analysis for the Kansas City area has also been done that is similar to that described above for the St. Louis area. Table 7.2-6 lists highway segments with AADT greater than 50,000. The maximum 2010 AADT in the St. Louis area is 152,856. Table 7.2-7 adds weighted AADT using truck volumes from the MODOT maps where available and using interpolated or extrapolated truck volumes otherwise.

For the Kansas City area, as shown in Tables 7.2-8 and 7.2-9, the eight segments with highest weighted AADT were the same as eight of the ten segments with the highest AADT (highlighted in Tables 7.2-6, 7.2-8, and 7.2-9).

Figure 7.2-6 shows the locations of these eight segments superimposed on a portion of one of the MODOT AADT maps. Four of the segments are on I-70 extending from I-435 on the west to a point between I-470 and Highway 7 on the east. Two of the segments are on I-435 between the Missouri/Kansas state line on the west and Highway 71 on the east. Two additional segments are on I-70 east of I-29 and on I-35 south of I-670, both in the central Kansas City area, shown on the inset map in the figure.

Figure 7.2-7 shows a wind rose for recent multiple years (2002 to 2006) at the Kansas City airport. The wind rose suggests that a near-road monitoring site would, in general, be best located north of a target roadway.

Preliminary Evaluation of Kansas City Area Sites

Based on review of aerial photographs of the identified segments and on a brief visit to the areas, suitable monitoring sites are most likely to be found in the first two areas described above, I-70 between I-435 on the west and a point between I-470 and Highway 7 on the east and I-435 between the Missouri/Kansas state line on the west and Highway 71 on the east. Aerial photographs of these two areas are shown in Figures 7.2-8 and 7.2-9. Field evaluation of potential monitoring sites is expected to be concentrated in these two areas on the north side of the respective roadways.

Table 7.2-6

| Kansas City Area Traffic Counts > 50,000 AADT (2010) | | | |
|--|----------|---------------|---------|
| Ranked by AADT | | | |
| No. | Highway | Location | AADT |
| 13 | I435S | e of st I | 152,856 |
| 46 | I70 | e of 670 | 135,266 |
| 12 | I435S | bet 71 & st I | 129,464 |
| 22 | I35 | s of 670 | 118,097 |
| 49 | I70 | e of 435 | 114,495 |
| 50 | I70 | | 114,034 |
| 8 | I435E | n of 70 | 103,008 |
| 35 | I670 | e of 35 | 99,388 |
| 52 | I70 | e of 470 | 98,488 |
| 51 | I70 | w of 470 | 98,244 |
| 26 | 71 | | 93,692 |
| 20 | I29/I35 | s of 24 | 92,249 |
| 44 | I70 | at 29/35/70? | 92,249 |
| 7 | I435E | s of 24 | 90,778 |
| 25 | 71 | | 90,385 |
| 29 | 71 | s of 50 | 89,131 |
| 9 | I435E | s of 70 | 88,710 |
| 48 | I70 | w of 435 | 85,528 |
| 3 | I29 | w of 169 | 83,933 |
| 6 | I435E | s of 210 | 82,545 |
| 23 | I35 | e of st I | 80,181 |
| 43 | I70 | e of 169 | 79,980 |
| 45 | I70 | s of 29/35/70 | 77,323 |
| 2 | I29 | s of 152 | 75,952 |
| 30 | 71 | | 74,995 |
| 39 | I470 | e of 71 | 74,891 |
| 24 | 71 | s of 670 | 73,392 |
| 10 | I435E | s of 350 | 73,354 |
| 19 | I29/I35 | n of 24 | 72,054 |
| 31 | 71 | n of 150 | 71,248 |
| 32 | 71 | s of 150 | 69,724 |
| 47 | I70 | | 69,715 |
| 53 | I70 | w of 7 | 69,390 |
| 40 | 50 | s of 470 | 69,228 |
| 16 | I35 | w of 1 | 68,634 |
| 42 | I70 | e of st I | 68,318 |
| 28 | 71 | n of 435 | 67,735 |
| 11 | I435E | n of 71 | 66,386 |
| 4 | I29 | w of 35 | 65,994 |
| 27 | 71 | | 65,107 |
| 36 | I470 | s of 40 | 64,739 |
| 5 | I435E | s of 35 | 63,464 |
| 34 | I670 | w of 35 | 61,233 |
| 33 | I670 | e of st I | 61,208 |
| 37 | I470 | | 59,514 |
| 18 | I29/I35 | s of junction | 59,044 |
| 38 | I470 | e of 50 | 58,863 |
| 21 | I35 | s of 70 | 58,389 |
| 14 | I35 | s of 152 | 56,716 |
| 41 | 50 | w of 291 | 55,759 |
| 17 | I35 | e of 29 | 53,185 |
| 15 | I35 | w of 435E | 52,884 |
| 1 | I435/I29 | near MCI | 50,153 |

Table 7.2-7

| Kansas City Area Traffic Counts > 50,000 AADT (2010) (as entered/unranked) | | | | | | | |
|--|----------|---------------|---------|------------|-------------|---------|----------|
| No. | Highway | Location | AADT | Truck AADT | Truck/Total | est T/T | adj AADT |
| 1 | I435/I29 | near MCI | 50,153 | | | 0.058 | 76,147 |
| 2 | I29 | s of 152 | 75,952 | 4,374 | 0.058 | 0.058 | 115,318 |
| 3 | I29 | w of 169 | 83,933 | | | 0.058 | 127,436 |
| 4 | I29 | w of 35 | 65,994 | | | 0.058 | 100,199 |
| 5 | I435E | s of 35 | 63,464 | | | 0.115 | 128,902 |
| 6 | I435E | s of 210 | 82,545 | 9,457 | 0.115 | 0.115 | 167,658 |
| 7 | I435E | s of 24 | 90,778 | | | 0.135 | 200,886 |
| 8 | I435E | n of 70 | 103,008 | | | 0.135 | 227,951 |
| 9 | I435E | s of 70 | 88,710 | | | 0.135 | 196,310 |
| 10 | I435E | s of 350 | 73,354 | 11,368 | 0.155 | 0.155 | 175,666 |
| 11 | I435E | n of 71 | 66,386 | | | 0.155 | 158,979 |
| 12 | I435S | bet 71 & st I | 129,464 | | | 0.155 | 310,037 |
| 13 | I435S | e of st I | 152,856 | | | 0.155 | 366,055 |
| 14 | I35 | s of 152 | 56,716 | | | 0.166 | 141,604 |
| 15 | I35 | w of 435E | 52,884 | 5,748 | 0.109 | 0.109 | 104,616 |
| 16 | I35 | w of 1 | 68,634 | 14,388 | 0.210 | 0.210 | 198,126 |
| 17 | I35 | e of 29 | 53,185 | | | 0.162 | 130,779 |
| 18 | I29/I35 | s of junction | 59,044 | 6,765 | 0.115 | 0.115 | 119,929 |
| 19 | I29/I35 | n of 24 | 72,054 | | | 0.155 | 172,584 |
| 20 | I29/I35 | s of 24 | 92,249 | | | 0.155 | 220,955 |
| 21 | I35 | s of 70 | 58,389 | | | 0.155 | 139,853 |
| 22 | I35 | s of 670 | 118,097 | | | 0.155 | 282,866 |
| 23 | I35 | e of st I | 80,181 | | | 0.155 | 192,049 |
| 24 | 71 | s of 670 | 73,392 | | | 0.067 | 117,333 |
| 25 | 71 | | 90,385 | | | 0.067 | 144,500 |
| 26 | 71 | | 93,692 | | | 0.067 | 149,787 |
| 27 | 71 | | 65,107 | | | 0.067 | 104,088 |
| 28 | 71 | n of 435 | 67,735 | 4,506 | 0.067 | 0.067 | 108,289 |
| 29 | 71 | s of 50 | 89,131 | | | 0.067 | 142,495 |
| 30 | 71 | | 74,995 | | | 0.067 | 119,896 |
| 31 | 71 | n of 150 | 71,248 | | | 0.067 | 113,905 |
| 32 | 71 | s of 150 | 69,724 | | | 0.067 | 111,469 |
| 33 | I670 | e of st I | 61,208 | | | 0.195 | 168,885 |
| 34 | I670 | w of 35 | 61,233 | 11,969 | 0.195 | 0.195 | 168,954 |
| 35 | I670 | e of 35 | 99,388 | 15,812 | 0.159 | 0.159 | 241,696 |
| 36 | I470 | s of 40 | 64,739 | 10,061 | 0.155 | 0.155 | 155,288 |
| 37 | I470 | | 59,514 | | | 0.135 | 131,817 |
| 38 | I470 | e of 50 | 58,863 | | | 0.135 | 130,375 |
| 39 | I470 | e of 71 | 74,891 | 8,580 | 0.115 | 0.115 | 152,111 |
| 40 | 50 | s of 470 | 69,228 | | | 0.115 | 140,609 |
| 41 | 50 | w of 291 | 55,759 | | | 0.115 | 113,252 |
| 42 | I70 | e of st I | 68,318 | 13,354 | 0.195 | 0.195 | 188,504 |
| 43 | I70 | e of 169 | 79,980 | | | 0.195 | 220,681 |
| 44 | I70 | at 29/35/70? | 92,249 | | | 0.195 | 254,534 |
| 45 | I70 | s of 29/35/70 | 77,323 | | | 0.195 | 213,350 |
| 46 | I70 | e of 670 | 135,266 | 26,440 | 0.195 | 0.195 | 373,226 |
| 47 | I70 | | 69,715 | | | 0.226 | 211,641 |
| 48 | I70 | w of 435 | 85,528 | | | 0.226 | 259,647 |
| 49 | I70 | e of 435 | 114,495 | | | 0.226 | 347,585 |
| 50 | I70 | | 114,034 | | | 0.226 | 346,185 |
| 51 | I70 | w of 470 | 98,244 | | | 0.226 | 298,250 |
| 52 | I70 | e of 470 | 98,488 | 25,305 | 0.257 | 0.257 | 326,233 |
| 53 | I70 | w of 7 | 69,390 | | | 0.257 | 229,848 |
| | | | | average | 0.150 | 0.143 | |

Table 7.2-8

| Kansas City Area Traffic Counts > 50,000 AADT (2010) | | | | |
|--|---------|---------------|---------|--|
| Ranked by AADT | | | | |
| No. | Highway | Location | AADT | |
| 13 | I435S | e of st I | 152,856 | |
| 46 | I70 | e of 670 | 135,266 | |
| 12 | I435S | bet 71 & st I | 129,464 | |
| 22 | I35 | s of 670 | 118,097 | |
| 49 | I70 | e of 435 | 114,495 | |
| 50 | I70 | | 114,034 | |
| 8 | I435E | n of 70 | 103,008 | |
| 35 | I670 | e of 35 | 99,388 | |
| 52 | I70 | e of 470 | 98,488 | |
| 51 | I70 | w of 470 | 98,244 | |

Table 7.2-9

| Kansas City Area Traffic Counts > 50,000 AADT (2010) | | | | |
|--|---------|---------------|---------|-----------|
| Ranked by adjusted AADT, trucks=14% (average) | | | | |
| No. | Highway | Location | AADT | Adj. AADT |
| 46 | I70 | e of 670 | 135,266 | 373,226 |
| 13 | I435S | e of st I | 152,856 | 366,055 |
| 49 | I70 | e of 435 | 114,495 | 347,585 |
| 50 | I70 | | 114,034 | 346,185 |
| 52 | I70 | e of 470 | 98,488 | 326,233 |
| 12 | I435S | bet 71 & st I | 129,464 | 310,037 |
| 51 | I70 | w of 470 | 98,244 | 298,250 |
| 22 | I35 | s of 670 | 118,097 | 282,866 |
| 48 | I70 | w of 435 | 85,528 | 259,647 |
| 44 | I70 | at 29/35/70? | 92,249 | 254,534 |

Figure 7.2-6

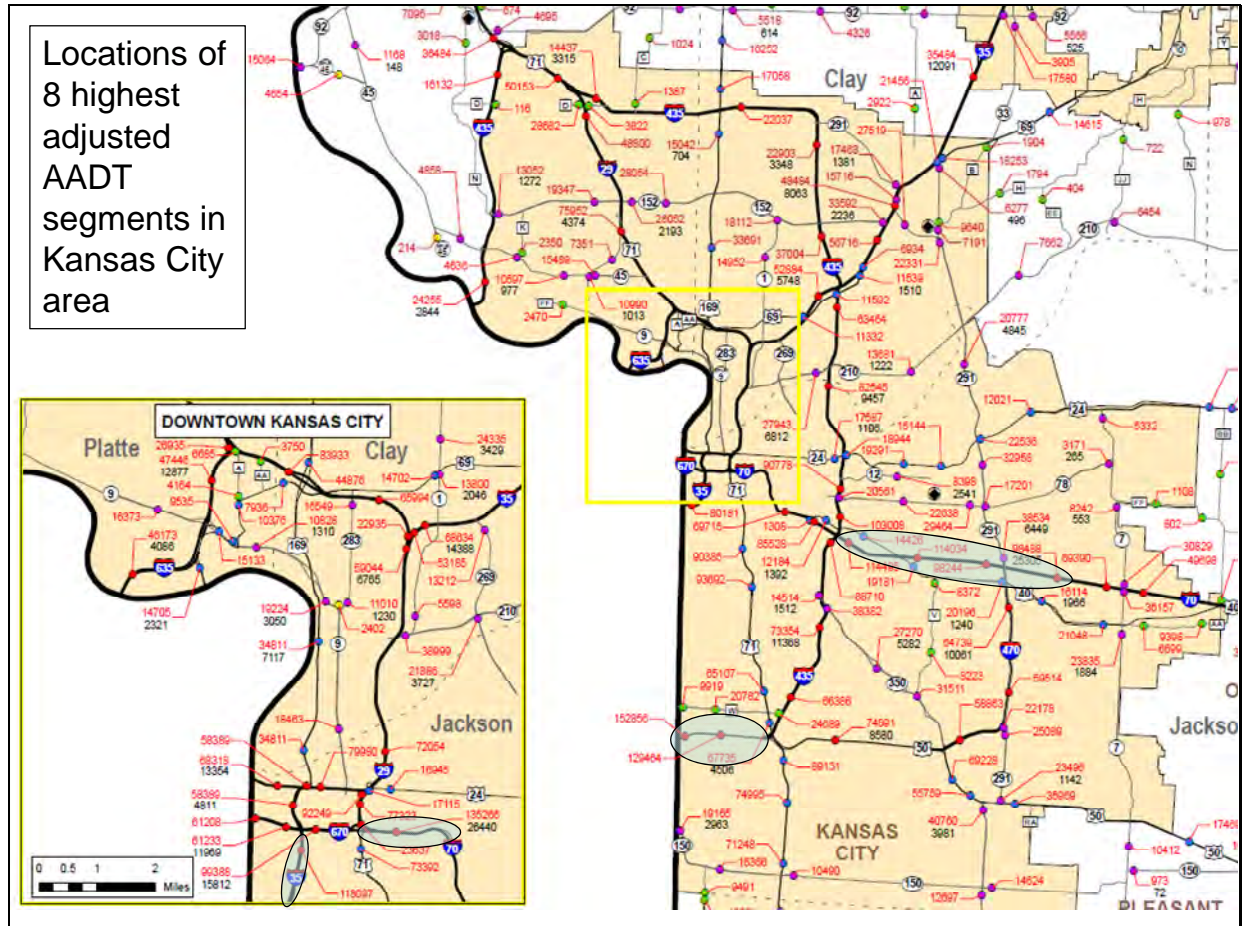


Figure 7.2-7

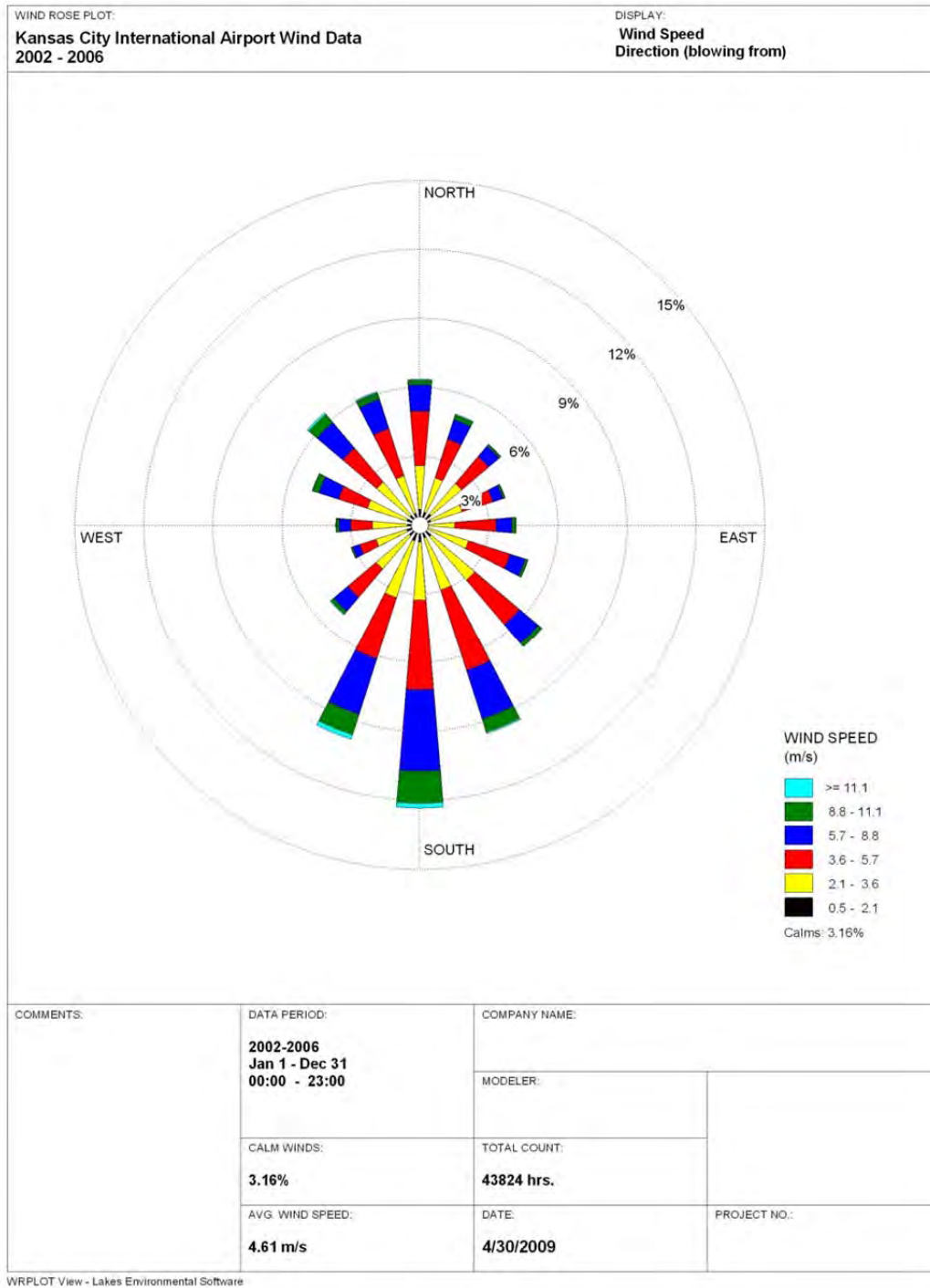


Figure 7.2-8. Aerial photograph of the I-70 area of interest between I-435 on the west and a point between I-470 and Highway 7 on the east.

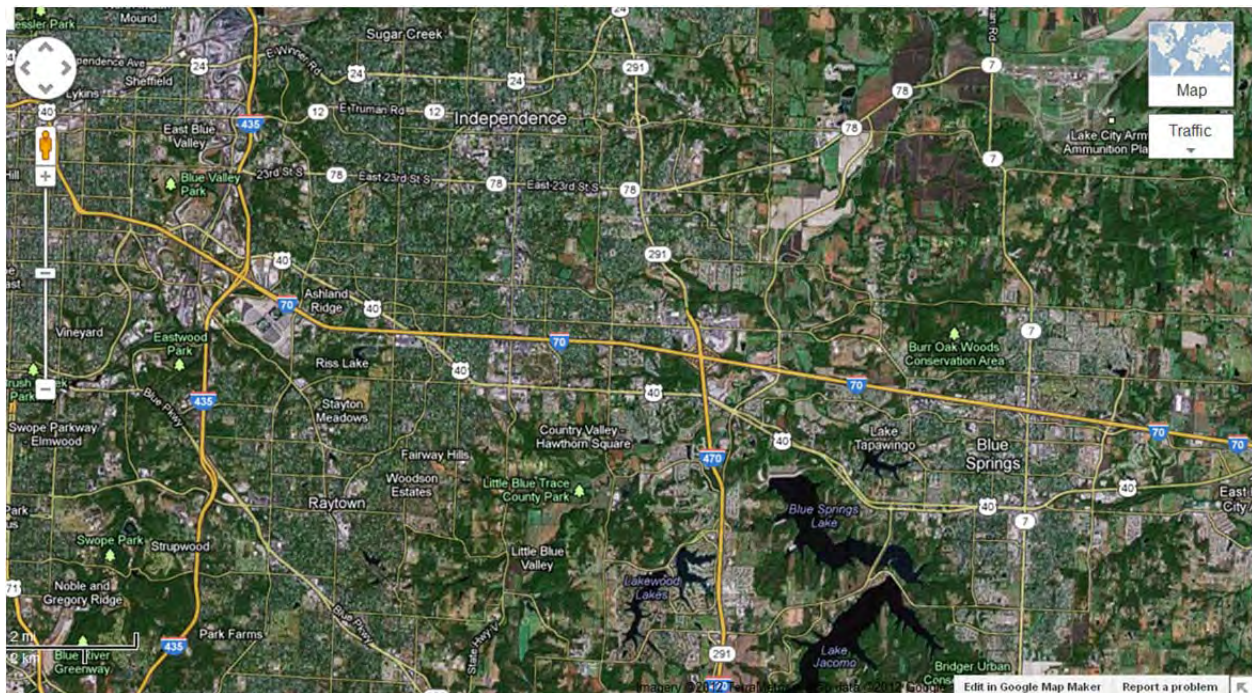
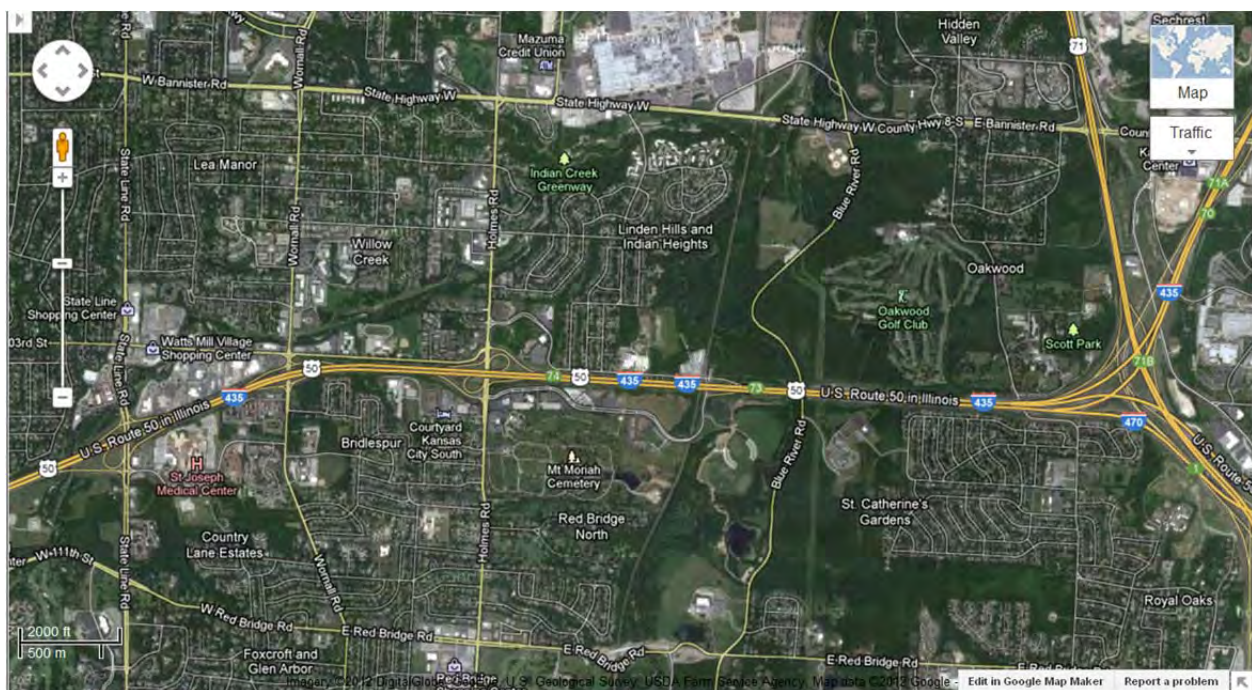


Figure 7.2-9. Aerial photograph of the I-435 area of interest between the state line on the west (indicated by State Line Road) and the interchange on the east.



8. Carbon Monoxide (CO) Monitoring Network

The department intends to add one near-roadway CO monitor to the network at the Forest Park I-40/64 near-roadway monitoring site (see location map in section 7.1). This monitor will satisfy the minimum near-roadway monitoring requirements for the St. Louis MO-IL CBSA. Changes to CO monitoring requirements were published in the Federal Register: August 31, 2011 (Volume 76, Number 169). These rules require near-roadway CO monitoring at a subset of the near-roadway NO₂ monitoring network in CBSAs with populations of 1 million or more.

The department intends to add one CO monitor at the Kansas City near-roadway monitoring site once that site has been identified. Consult section 7.2 for a discussion about the status of the Kansas City area near-roadway monitoring site planning process.

9. Rural National Core

EPA expressed interest in pursuing the installation and operation of a rural NCore site in Missouri. Department staff suggested EPA evaluate the Mark Twain State Park Site as a candidate for consideration of the rural NCore site due to its location and the historically low PM₁₀ and SO₂ concentrations measured at the site. EPA is considering providing up-front one-time equipment purchases and continued operation and maintenance funds to support this project. Since this project would be in addition to existing NCore monitoring requirements which the state of Missouri has satisfied at the Blair St. site, the department is waiting for EPA to identify specifically what funding will be available for this project before committing resources to the project. The department will continue to work with EPA Region VII staff to pursue this project at some time in the future.

Network Description/Components

See Appendix 1 for the Network Description, which includes the following components.

Site Data

All ambient air monitoring sites are recorded in the EPA's Air Quality System database. Data includes location data such as latitude & longitude.

Air Quality System Site Code

The site code includes a numerical designation for State, county, and individual site. The state and county codes are assigned a number based on the alphabetical order of the State or county. Site numbers are assigned sequentially by date established in most counties. St. Louis County sites also have a division for municipality within St. Louis County.

Street Address

The official Post Office address of the lot where the monitors are located. Because not all sites are located in cities or towns, the street address is occasionally given as the intersection of the nearest streets or highways.

Geographical Coordinates

The coordinate system used by Missouri Department of Natural Resources is latitude and longitude.

Air Quality Control Region

Air Quality Control Regions, or AQCR, are defined by EPA and designates either urban regions, like St. Louis or Kansas City, or rural sections of a state, such as northeast or southwest Missouri.

| <u>AQCR</u> | <u>AQCR Name</u> |
|-------------|--------------------------|
| 070 | Metropolitan St. Louis |
| 094 | Metropolitan Kansas City |
| 137 | Northern Missouri |
| 138 | SE Missouri |
| 139 | SW Missouri |

Core Based Statistical Area

Core Based Statistical Areas, or CBSA are defined by the U.S. Census Bureau.

| <u>CBSA Code</u> | <u>CBSA Name</u> |
|------------------|-------------------------------|
| 00000 | Not in a CBSA |
| 16020 | Cape Girardeau-Jackson, MO-IL |
| 17860 | Columbia, MO |
| 27620 | Jefferson City, MO |
| 27900 | Joplin, MO |
| 28140 | Kansas City, MO-KS |
| 41140 | St. Joseph, MO-KS |
| 41180 | St. Louis, MO-IL |
| 44180 | Springfield, MO |

Monitor Data

Each monitor is designed to detect a specific chemical pollutant or group of related pollutants. A site may have one or many monitors and not all sites will have the same monitors.

Pollutant

The common name of the pollutant. “Criteria” pollutants are defined by statute in the Clean Air Act.

Air Quality System Pollutant Code

Each pollutant has a specific numerical code to distinguish it from others. One monitor in St. Louis City uses a code of ‘00000’ because the monitor detects an entire group of chemicals, volatile organic pollutants, which are too numerous to list individually.

| <u>Pollutant Code</u> | <u>Pollutant</u> |
|-----------------------|--------------------------------------|
| 00000 | Volatile Organic Compounds, or VOCs |
| 14129 | Lead – Local Conditions |
| 42101 | Carbon Monoxide |
| 42401 | Sulfur Dioxide |
| 42406 | Sulfur Dioxide 5-min |
| 42600 | Reactive Oxides of N (NOY) |
| 42601 | Nitric Oxide |
| 42602 | Nitrogen Dioxide |
| 42603 | Oxides of Nitrogen |
| 44201 | Ozone |
| 61103 | Resultant Wind Speed |
| 61104 | Resultant Wind Direct |
| 62101 | Outdoor Temperature |
| 62107 | Indoor Temperature |
| 62201 | Relative Humidity |
| 63301 | Solar Radiation |
| 64101 | Barometric Pressure |
| 68105 | Average Ambient Temperature |
| 68108 | Sample Baro Pressure |
| 81102 | PM ₁₀ |
| 84313 | Black Carbon |
| 85101 | PM ₁₀ - LC |
| 85129 | Lead PM ₁₀ LC - FRM/FEM |
| 86101 | PM _{Coarse} - LC (FRM Diff) |
| 86502 | Acceptable PM _{Coarse} - LC |
| 88101 | PM _{2.5} FRM |
| 88500 | PM _{2.5} Tot Atmospheric |
| 88501 | PM _{2.5} Raw Data |
| 88502 | PM _{2.5} AQI/Speciation |
| 88503 | PM _{2.5} Reference |

Parameter Occurrence Code

The Parameter Occurrence Code (POC) distinguishes between different monitors for the same pollutant, most often collocated monitors used for precision and quality assurance. For PM_{2.5}, different parameter occurrence codes are assigned to FRM, collocated FRM, continuous, and speciation monitors.

Collocated

Collocated monitors are used for precision and quality assurance activities, and for redundancy for critical pollutants such as ozone.

Sampling Frequency

Sampling frequency varies for each pollutant, depending on the nature of the NAAQS standard and the technology used in the monitoring method. Most gaseous pollutants, PM_{2.5} and PM₁₀ monitors use continuous monitoring FEM methods and are averaged over one hour. Some particulate pollutants are filter-based FRM methods and averaged over one day.

Scale of Representation

Each monitor is intended to represent an area with similar pollutant concentration. The scales range from only a few meters to many kilometers.

MIC Microscale - defines the concentration in air volumes associated with area dimensions ranging from several meters up to about 100 meters.

MID Middle - defines the concentration typical of areas up to several city blocks in size with dimensions ranging from about 100 meters to 0.5 kilometers.

NBR Neighborhood - defines concentrations within an extended area of a city that has relatively uniform land use with dimensions in the 0.5 to 4.0 kilometers.

URB Urban - defines an overall citywide condition with dimensions on the order of 4 to 50 kilometers.

REG Regional - defines air quality levels over areas having dimensions of 50 to hundreds of kilometers.

Monitor Type

The monitor's administrative classification as determined by the purpose for the monitor in the agency sampling strategy. Assignment of monitor types "NCORE" and "PAMS" is limited to EPA Headquarters and is done only after a complete review and approval is done for all site/monitor metadata.

Code

Description

| | |
|-----------------|---|
| IMPROVE | IMPROVE or IMPROVE Protocol |
| INDEX SITE | (not currently used by MO) |
| INDUSTRIAL | Used to indicate sites operated by an industry PQAO |
| NATTS | National Air Toxics Trends Station |
| NON-EPA FEDERAL | (not currently used by MO) |

| | |
|---|---|
| NON-REGULATORY PAMS | Note use for NAAQS Compliance |
| PROPOSED NCORE QA COLLOCATED SLAMS | Collocated to Satisfy 40 CFR Part 58, Appendix A State or Local Air Monitoring Station |
| SPECIAL PURPOSE SUPLMNTL SPECIATION TRENDS SPECIATION | Special Purpose Monitoring Station (SPM or SPMS) |
| TRIBAL MONITORS | (not currently used by MO) |
| UNOFFICIAL PAMS | (not currently used by MO) |

Monitoring Objective

Each monitor has a distinct objective such as providing real-time data for public awareness or use in determining compliance with regulations.

| <u>Objective Code</u> | <u>Objective</u> |
|-----------------------|---------------------|
| AQI | Public Information |
| COM | NAAQS Compliance |
| MET | Meteorological Data |
| RES | Research |
| STA | State Standard |

Units

The physical terms used to quantify the pollutant concentration, such as parts per million or micrograms per cubic meter.

| <u>Unit Code</u> | <u>Unit Description</u> |
|------------------|-----------------------------|
| 001 | $\mu\text{g}/\text{m}^3$ |
| 007 | parts per million |
| 008 | parts per billion |
| 012 | miles per hour |
| 013 | knots |
| 014 | degree, compass |
| 015 | degree Fahrenheit |
| 017 | degree Celsius |
| 018 | Langleys |
| 019 | percent humidity |
| 022 | inches Mercury |
| 025 | Langleys per minute |
| 079 | Watts/m^2 |
| 105 | $\mu\text{g}/\text{m}^3$ LC |
| 121 | parts per trillion |

Monitoring/Analytical Method

Each monitor relies on a scientific principle to determine the pollutant concentration, which is described by the sampling method. Each method code is specific for a particular pollutant; therefore a three numeral code may be used for different methods for different pollutants.

APPENDIX 1: MISSOURI MONITORING NETWORK DESCRIPTION

Missouri Ambient Air Monitoring Network



| | | |
|---------------------|--|--|
| <i>MIC</i> | <i>Microscale</i> | <i>1 to 100 square meters</i> |
| <i>MID</i> | <i>Middle</i> | <i>0.1 to 0.5 square kilometer</i> |
| <i>NBR</i> | <i>Neighborhood</i> | <i>0.5 to 4 square kilometers</i> |
| <i>REG</i> | <i>Regional</i> | <i>> 10 square kilometers, rural</i> |
| <i>URB</i> | <i>Urban</i> | <i>4 to 50 square kilometers, city</i> |
| <i>COM</i> | <i>NAAQS Compliance</i> | |
| <i>MET</i> | <i>Meteorological Data</i> | |
| <i>N/A</i> | <i>Not Applicable</i> | |
| <i>NCore</i> | <i>National Multi-Pollutant Monitoring Stations</i> | |
| <i>NON-A</i> | <i>Non-Ambient Site</i> | |
| <i>NON-R</i> | <i>Non-Regulatory</i> | |
| <i>RES</i> | <i>Research</i> | |
| <i>SLAMS</i> | <i>State and Local Monitoring Stations</i> | |
| <i>SIP</i> | <i>State Implementation Plan</i> | |
| <i>SPEC</i> | <i>Speciation</i> | |
| <i>STA</i> | <i>State Standard</i> | |
| <i>SPM</i> | <i>Special Purpose Monitoring</i> | |
| <i>**</i> | <i>Monitor to be installed and operated at a later date</i> | |
| <i>^^</i> | <i>Monitoring Operations transferred from the Local Agencies to the State</i> | |

City Utilities

James River South

AQS Site Number **29-077-0037**

James River South, Springfield, MO 65804

Latitude: 37.104461 **AQCR:** 139 SW Missouri

Longitude: -93.25339 **MSA:** 7920 Springfield, MO

Elevation (ft): 1227

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|---------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|-----------------------|----------------------------|
| Sulfur Dioxide | 42401 | Industrial | 3 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |
| Sulfur Dioxide Max 5-min Avg | 42406 | Industrial | 3 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |

Wildwood Lane

AQS Site Number **29-077-0040**

1234 Wildwood Lane, Springfield, MO 65804

Latitude: 37.108889 **AQCR:** 139 SW Missouri

Longitude: -93.252778 **MSA:** 7920 Springfield, MO

Elevation (ft): 1231

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|---------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|-----------------------|----------------------------|
| Sulfur Dioxide | 42401 | Industrial | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |
| Sulfur Dioxide Max 5-min Avg | 42406 | Industrial | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |

Doe Run Buick

Doe Run Buick - Buick NE

AQS Site Number **29-093-9008**

347 Power Lane (Address, Elevation, Lati, and Longi to be confirmed)

Latitude: 37.65214 **AQCR:** 138 SE Missouri

Longitude: -91.11689 **MSA:** 0000 Not in a MSA

Elevation (ft): 1423

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---------------------------|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/6 | MID | COM | 105 | ug/m^3-LC | 113 | Doe Run Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Doe Run Buick - North #5

AQS Site Number **29-093-0021**

Doe Run Buick - North#5, Buick, MO 65439

Latitude: 37.654167 **AQCR:** 138 SE Missouri

Longitude: -91.130556 **MSA:** 0000 Not in a MSA

Elevation (ft):

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---------------------------|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/6 | MID | COM | 105 | ug/m^3-LC | 113 | Doe Run Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Doe Run Buick - South #1

AQS Site Number **29-093-0016**

Doe Run Buick - South#1, Buick, MO 65439

Latitude: 37.625278 **AQCR:** 138 SE Missouri

Longitude: -91.129167 **MSA:** 0000 Not in a MSA

Elevation (ft):

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---------------------------|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/6 | N/A | SIP | 017 | deg C | 780 | Instrumental | NON-A |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input checked="" type="checkbox"/> | 1/6 | MID | SIP | 105 | ug/m^3-LC | 113 | Doe Run Mass Spectra ICAP | NON-A |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/6 | N/A | SIP | 059 | mm (Hg) | 780 | Instrumental | NON-A |

Doe Run Glover

Doe Run Glover - Big Creek #5

AQS Site Number **29-093-0029**

Doe Run Glover - Big Creek #5, Glover, MO 65439

Latitude: 37.471667 **AQCR:** 138 SE Missouri

Longitude: -90.689444 **MSA:** 0000 Not in a MSA

Elevation (ft): 927

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|--------------------------------------|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/6 | MID | COM | 105 | ug/m^3-LC | 110 | Pima Co., AZ Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Doe Run Glover - Post Office #2

AQS Site Number **29-093-0027**

Doe Run Glover - Post Office #2, Glover, MO 65439

Latitude: 37.486111 **AQCR:** 138 SE Missouri

Longitude: -90.69 **MSA:** 0000 Not in a MSA

Elevation (ft): 927

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|--------------------------------------|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input checked="" type="checkbox"/> | 1/6 | MID | COM | 105 | ug/m^3-LC | 110 | Pima Co., AZ Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Doe Run Herculaneum

Herculaneum, Broad Street

AQS Site Number **29-099-9005**

847 Broad St., Herculaneum, MO, 63048

Latitude: 38.261667 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.379722 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 500

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | SIP | 017 | deg C | 780 | Instrumental | NON-A |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/6 | MID | SIP | 105 | ug/m^3-LC | 189 | Inter-Mountain Lab, Inc Mass Spectra ICAP | NON-A |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | SIP | 059 | mm (Hg) | 780 | Instrumental | NON-A |

Herculaneum, Church Street

AQS Site Number **29-099-0024**

951 Church St., Herculaneum, MO 63048

Latitude: 38.258667 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.380889 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 463

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input checked="" type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 189 | Inter-Mountain Lab, Inc Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/3 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Herculaneum, City Hall (Mott Street)

AQS Site Number **29-099-0020**

Mott Street, Herculaneum, MO, 63048

Latitude: 38.263394 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.379667 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 468

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input checked="" type="checkbox"/> | 1/1 | MID | COM | 105 | ug/m^3-LC | 189 | Inter-Mountain Lab, Inc Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Herculaneum, Dunklin High School

AQS Site Number **29-099-9002**

1 Black Cat Dr., Herculaneum, MO, 63048

Latitude: 38.267222 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.37833 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 445

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---|----------------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 189 | Inter-Mountain Lab, Inc Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Herculaneum, North Cross

AQS Site Number **29-099-0023**

North Cross, Herculaneum, MO 63048

Latitude: 38.263378 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.381122 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 463

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|------------------|-----------------|--------------------------|------------|------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---------------|----------------------------|
|------------------|-----------------|--------------------------|------------|------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---------------|----------------------------|

| | | | | | | | | | | | |
|-------------------------------|-------|------------|---|--------------------------|-----|-----|-----|-----|-----------|-----|---|
| Ambient Temperature | 68105 | Industrial | 1 | <input type="checkbox"/> | 1/1 | N/A | COM | 017 | deg C | 780 | Instrumental |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/1 | NBR | COM | 105 | ug/m^3-LC | 189 | Inter-Mountain Lab, Inc Mass Spectra ICAP |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input type="checkbox"/> | 1/1 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental |

Herculaneum, Sherman

AQS Site Number **29-099-9004**

460 Sherman St., Herculaneum, MO, 63048

Latitude: 38.2717 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.376520 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 462

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor-Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit-Code</i> | <i>Unit</i> | <i>Method-Code</i> | <i>Method</i> | <i>Monitor-Status</i> |
|-------------------------------|-----------------|---------------------|------------|--------------------------|-------------|--------------|------------|------------------|-------------|--------------------|---|-----------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 189 | Inter-Mountain Lab, Inc Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Ursuline North

AQS Site Number **29-099-9006**

210 Glennon Heights Rd., Crystal City, MO 63019

Latitude: 38.243 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.37372 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 578

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor-Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit-Code</i> | <i>Unit</i> | <i>Method-Code</i> | <i>Method</i> | <i>Monitor-Status</i> |
|-------------------------------|-----------------|---------------------|------------|--------------------------|-------------|--------------|------------|------------------|-------------|--------------------|---|-----------------------|
| Ambient Temperature | 68105 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | Industrial | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 189 | Inter-Mountain Lab, Inc Mass Spectra ICAP | |
| Sample Baro Pressure | 68108 | Industrial | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Environmental Services

Alba

AQS Site Number **29-097-0004**

20400 Millwood Rd., Alba, MO 64755

Latitude: 37.2348 **AQCR:** 139 SW Missouri

Longitude: -94.42475 **MSA:** 3710 Joplin, MO

Elevation (ft): 965

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|--------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|-------------------------|----------------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |

Arnold West

AQS Site Number **29-099-0019**

1709 Lonedell Dr., Arnold, MO 63010

Latitude: 38.448581 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.398436 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 636

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|------------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|----------------------------------|----------------------------|
| Acceptable PM2.5 AQI/SPEC | 88502 | SPEC | 6 | <input type="checkbox"/> | 1/3 | NBR | RES | 105 | ug/m^3-LC | 810 | METONE SASS | |
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | |

| | | | | | | | | | | | |
|----------------------------|-------|-------|---|--------------------------|---|-----|-----|-----|-----------|-----|--------------------------|
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FDMS-Gravimetric 1405-DF |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation |

Bill's Creek

AQS Site Number **29-179-0001**

0.75 mile S. of 3229 County Rd., Boss, MO 65440

Latitude: 37.53467 **AQCR:** 138 SE Missouri
Longitude: -91.14857 **MSA:** 0000 Not in a MSA
Elevation (ft): 996

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|-------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|---------------------------------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 803 | Off-Site Avg Temperature | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 803 | Off-Site Avg Pressure | |

Blair Street

AQS Site Number **29-510-0085**

3247 Blair Street, St. Louis, MO 63107

Latitude: 38.65640 **AQCR:** 070 Metropolitan St. Louis
Longitude: -90.19845 **MSA:** 7040 St. Louis, MO-IL
Elevation (ft): 450

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|---------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|-------------|----------------|
| Acceptable PM2.5 AQI/SPEC | 88502 | SPEC | 6 | <input type="checkbox"/> | 1/3 | NBR | RES | 105 | ug/m^3-LC | 810 | METONE SASS | |

| | | | | | | | | | | | |
|--------------------------------|-------|-------|--------------------------|-------------------------------------|-----|-----|-----|-----------|-----------|---------------------------------------|---------------------------------|
| Acceptable PMCoarse - LC 86502 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | |
| Ambient Temperature | 68105 | SLAMS | 3 | <input checked="" type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 127 | Lo-Vol R&P 2025 Sequential |
| Ambient Temperature | 68105 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 017 | deg C | 118 | Lo-Vol R&P 2025 Sequential |
| Ambient Temperature | 68105 | SLAMS | 5 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental |
| Baro Pressure | 64101 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental |
| Black Carbon PM2.5 STP | 84313 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | RES | 001 | ug/m^3 | 866 | Magee Scientific AE21ER |
| Carbon Monoxide | 42101 | NCORE | 1 | <input type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 055 | Gas Filter Corr Thermo Electron |
| Indoor Temperature | 62107 | SLAMS | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging |
| Lead (TSP) - LC FRM/FEM 14129 | NCORE | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Nitric Oxide | 42601 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 591 | Chemiluminescence |
| Outdoor Temperature | 62101 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging |
| Ozone | 44201 | NCORE | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |
| PM10 - LC | 85101 | SPM | 1 | <input checked="" type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 127 | Lo-Vol R&P 2025 Sequential |
| PM10 - Total STP | 81102 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1/3 | NBR | COM | 001 | ug/m^3 | 127 | Lo-Vol R&P 2025 Sequential |
| PM2.5 - LC | 88101 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1/1 | NBR | COM | 105 | ug/m^3-LC | 118 | Lo-Vol R&P 2025 Sequential |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FMDS-Gravimetric 1405-DF |
| PM2.5 Tot Atmospheric | 88500 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |

| | | | | | | | | | | | |
|------------------------------|-------|-------|---|-------------------------------------|-----|-----|-----|-----|-----------|-----|-------------------------------------|
| PM2.5 Volatile Channel | 88503 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |
| PMCoarse - LC (FRM Diff) | 86101 | SLAMS | 1 | <input type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 176 | Thermo 2025 Sequential PM10-PM2.5 |
| Reactive Oxides of N (NOY) | 42600 | NCORE | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 591 | Chemiluminescence |
| Relative Humidity | 62201 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental |
| Sample Baro Pressure | 68108 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 059 | mm (Hg) | 118 | Lo-Vol R&P 2025 Sequential |
| Sample Baro Pressure | 68108 | SLAMS | 5 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental |
| Sample Baro Pressure | 68108 | SLAMS | 3 | <input checked="" type="checkbox"/> | 1/3 | N/A | COM | 059 | mm (Hg) | 127 | Lo-Vol R&P 2025 Sequential |
| Solar Radiation | 63301 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | MET | 079 | W/m^2 | 011 | Instrumental |
| Sulfur Dioxide | 42401 | NCORE | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 600 | Ultraviolet Fluorescence API 100 EU |
| Sulfur Dioxide Max 5-min Avg | 42406 | NCORE | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 600 | Ultraviolet Fluorescence API 100 EU |
| Wind Direction - Resultant | 61104 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation |
| Wind Speed - Resultant | 61103 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation |

Bonne Terre

AQS Site Number **29-186-0005**

15797 Highway D, Bonne Terre, MO 63628

Latitude: 37.90084 **AQCR:** 138 SE Missouri

Longitude: -90.42388 **MSA:** 0000 Not in a MSA

Elevation (ft): 840

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|---------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|----------------------|----------------|
| Acceptable PM2.5 AQI/SPEC | 88502 | SPEC | 5 | <input type="checkbox"/> | 1/6 | REG | RES | 105 | ug/m^3-LC | 810 | METONE SASS | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |

| | | | | | | | | | | | |
|----------------------------|-------|-------|---|-------------------------------------|---|-----|-----|-----|-------|-----|-------------------------|
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | REG | COM | 007 | ppm | 047 | Ultraviolet Photometric |
| Solar Radiation | 63301 | SPM | 1 | <input type="checkbox"/> | 1 | REG | MET | 079 | W/m^2 | 011 | Instrumental |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | REG | MET | 014 | deg | 020 | Vector Summation |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | REG | MET | 012 | mph | 020 | Vector Summation |

Branch Street

AQS Site Number **29-510-0093**

100 Branch St., St. Louis, MO 63102

Latitude: 38.653716 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.186816 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 422

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor-Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit-Code</i> | <i>Unit</i> | <i>Method-Code</i> | <i>Method</i> | <i>Monitor-Status</i> |
|--------------------------|-----------------|---------------------|------------|--------------------------|-------------|--------------|------------|------------------|-------------|--------------------|----------------------------|-----------------------|
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | MID | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 118 | Lo-Vol R&P 2025 Sequential | ^^ |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | ^^ |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | MID | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |
| PM10 - Total STP | 81102 | SLAMS | 3 | <input type="checkbox"/> | 1 | MID | COM | 001 | ug/m^3 | 079 | R&P SA246B TEOM | ^^ |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | MID | COM | 105 | ug/m^3-LC | 182 | FDMS-Gravimetric 1405-DF | ^^ |
| PM2.5 - LC | 88101 | SLAMS | 1 | <input type="checkbox"/> | 1/3 | MID | COM | 105 | ug/m^3-LC | 118 | Lo-Vol R&P 2025 Sequential | ^^ |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | MID | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |

| | | | | | | | | | | | | |
|----------------------------|-------|-----|---|--------------------------|-----|-----|-----|-----|-----------|-----|----------------------------|----|
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | MID | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 059 | mm (Hg) | 118 | Lo-Vol R&P 2025 Sequential | ^^ |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | ^^ |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | ^^ |

Branson

AQS Site Number **29-213-0004**

251 SW. Outer Rd., Branson, MO 65616

Latitude: 36.70765 **AQCR:** 139 SW Missouri

Longitude: -93.22181 **MSA:** 0000 Not in a MSA

Elevation (ft): 1052

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|----------------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-------|-------------|-------------------------|----------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SPM | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

Buick NE

AQS Site Number **29-093-0034**

346 Power Lane, Bixby West, MO 65439

Latitude: 37.65212 **AQCR:** 138 SE Missouri

Longitude: -91.11653 **MSA:** 0000 Not in a MSA

Elevation (ft): 1458

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|---------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-------|-------------|--------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 017 | deg C | 780 | Instrumental | |

| | | | | | | | | | | | |
|-------------------------------|-------|-------|---|-------------------------------------|-----|-----|-----|-----|-----------|-----|---------------------------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input checked="" type="checkbox"/> | 1/6 | MID | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry |
| Sample Baro Pressure | 68108 | SPM | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental |
| Sulfur Dioxide | 42401 | SLAMS | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent |
| Sulfur Dioxide Max 5-min Avg | 42406 | SLAMS | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation |

Carthage

AQS Site Number **29-097-0003**

530 Juniper, Carthage, MO 64836

Latitude: 37.21000 **AQCR:** 139 SW Missouri

Longitude: -94.307778 **MSA:** 3710 Joplin, MO

Elevation (ft): 986

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor-Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit-Code</i> | <i>Unit</i> | <i>Method-Code</i> | <i>Method</i> | <i>Monitor-Status</i> |
|----------------------------|-----------------|---------------------|------------|--------------------------|-------------|--------------|------------|------------------|-------------|--------------------|----------------------|-----------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| PM10 - Total STP | 81102 | SLAMS | 3 | <input type="checkbox"/> | 1 | MID | COM | 001 | ug/m^3 | 079 | R&P SA246B TEOM | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

El Dorado Springs (PM2.5:DF to replace VSCC)

AQS Site Number **29-039-0001**

Highway 97 & Barnes Road, El Dorado Springs, MO 64744

Latitude: 37.6900 **AQCR:** 139 SW Missouri

Longitude: -94.035 **MSA:** 0000 Not in a MSA

Elevation (ft): 965

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|----------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|--------------------------|----------------------------|
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | REG | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | ** |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | REG | MET | 017 | deg C | 040 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input type="checkbox"/> | 1 | REG | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | REG | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | REG | COM | 105 | ug/m^3-LC | 182 | FMDS-Gravimetric 1405-DF | ** |
| PM2.5 - LC | 88101 | SLAMS | 3 | <input type="checkbox"/> | 1 | REG | COM | 105 | ug/m^3-LC | 181 | PM2.5 VSCC FEM | |
| PM2.5 Tot Atmospheric | 88500 | NON-R | 3 | <input type="checkbox"/> | 1 | REG | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | REG | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | REG | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Volatile Channel | 88503 | NON-R | 3 | <input type="checkbox"/> | 1 | REG | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | ** |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | REG | MET | 014 | deg | 020 | Vector Summation | |

Wind Speed - Resultant 61103 SPM 1 ☐ 1 REG MET 012 mph 020 Vector Summation

Farrar

AQS Site Number **29-157-0001**

County Rd. 342, Farrar, MO 63746

Latitude: 37.70264 **AQCR:** 138 SE Missouri

Longitude: -89.698640 **MSA:** 0000 Not in a MSA

Elevation (ft): 497

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|----------------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-------|-------------|-------------------------|----------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

Fellows Lake

AQS Site Number **29-077-0042**

4208 E. Farm Rd. 66, Springfield, MO 65803

Latitude: 37.319444 **AQCR:** 139 SW Missouri

Longitude: -93.204444 **MSA:** 7920 Springfield, MO

Elevation (ft): 1346

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|----------------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-------|-------------|-------------------------|----------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | URB | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | URB | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | URB | MET | 012 | mph | 020 | Vector Summation | |

Finger Lakes

AQS Site Number **29-019-0011**

1505 E. Peabody Road, Columbia, MO 65202

Latitude: 39.07803 **AQCR:** 137 Northern Missouri

Longitude: -92.31632 **MSA:** 1740 Columbia, MO

Elevation (ft): 726

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|--------------------|----------|------------------|-----|-------------------------------------|------|-------|-----|---------------|-------|-----------------|----------------------------|--------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |

Fletcher

AQS Site Number **29-179-0002**

Forest Rd. 2236, Westfork, MO 64498

Latitude: 37.46889 **AQCR:** 138 SE Missouri

Longitude: -91.08847 **MSA:** 0000 Not in a MSA

Elevation (ft): 1256

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|-------------------------------|----------|------------------|-----|--------------------------|------|-------|-----|---------------|-----------|-----------------|---|--------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 803 | Off-Site Avg Temperature | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 803 | Off-Site Avg Pressure | |

Foley

AQS Site Number **29-113-0003**

#7 Wild Horse, Foley, MO 63347

Latitude: 39.0447 **AQCR:** 137 Northern Missouri

Longitude: -90.8647 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 715

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|--------------------|----------|------------------|-----|--------------------------|------|-------|-----|---------------|-------|-----------------|-------------------------|--------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |

| | | | | | | | | | | | |
|----------------------------|-------|-------|---|-------------------------------------|---|-----|-----|-----|-----|-----|-------------------------|
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation |

Forest City, Exide Levee

AQS Site Number **29-087-0008**

300 S. Washington St., Oregon MO, 64473

Latitude: 40.027222 **AQCR:** 137 Northern Missouri

Longitude: -95.235833 **MSA:** 0000 Not in a MSA

Elevation (ft): 904

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|------------------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-----------|-------------|----------------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input checked="" type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 811 | Thermo/R&P 2025 PM10 | |
| Lead PM10 LC - FRM/FEM 85129 | | SPM | 1 | <input checked="" type="checkbox"/> | 1/6 | MID | COM | 105 | ug/m^3-LC | 811 | Thermo/R&P 2025 PM10 | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input checked="" type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 811 | Thermo/R&P 2025 PM10 | |

Forest Park (To include Precipitation)

AQS Site Number **29-510-0094**

McKinley Dr., St. Louis, MO 63110

Latitude: 38.631057 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.281144 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 000

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|--------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|--------------------------|----------------|
| Acceptable PMCoarse - LC 86502 | | SPM | 1 | <input type="checkbox"/> | 1 | MIC | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | MET | 059 | mm (Hg) | 014 | Instrumental | ** |
| Black Carbon PM2.5 STP 84313 | | SPM | 1 | <input type="checkbox"/> | 1 | MIC | COM | 001 | ug/m^3 | 866 | Magee Scientific AE21ER | ** |
| Carbon Monoxide | 42101 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | COM | 007 | ppm | 054 | Non-dispersive Infrared | ** |

| | | | | | | | | | | | | |
|----------------------------|-------|-------|---|--------------------------|---|-----|-----|-----|-----------|-----|--------------------------|----|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | ** |
| Nitrogen Dioxide | 42602 | SLAMS | 1 | <input type="checkbox"/> | 1 | MIC | COM | 008 | ppb | 074 | Chemiluminescence | ** |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | MET | 017 | deg C | 040 | Electronic Averaging | ** |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | MIC | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 - LC | 88101 | SPM | 4 | <input type="checkbox"/> | 1 | MIC | COM | 105 | ug/m^3-LC | 182 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | MET | 019 | %humidity | 020 | Instrumental | ** |
| Solar Radiation | 63301 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | MET | 079 | W/m^2 | 011 | Instrumental | ** |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | MET | 014 | deg | 020 | Vector Summation | ** |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | MIC | MET | 012 | mph | 020 | Vector Summation | ** |

Front Street (PM10:TEOM to replace Lo-Vol)

*AQS Site Number***29-095-0018**

1331 N. Jackson, Kansas City, MO 64120

Latitude: 39.13198 **AQCR:** 094 Metropolitan Kansas City

Longitude: -94.53128 **MSA:** 3760 Kansas City, MO-KS

Elevation (ft): 728

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor-Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit-Code</i> | <i>Unit</i> | <i>Method-Code</i> | <i>Method</i> | <i>Monitor-Status</i> |
|---------------------|-----------------|---------------------|------------|--------------------------|-------------|--------------|------------|------------------|-------------|--------------------|----------------------------|-----------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 127 | Lo-Vol R&P 2025 Sequential | |
| PM10 - LC | 85101 | SPM | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 127 | Lo-Vol R&P 2025 Sequential | |
| PM10 - Total STP | 81102 | SLAMS | 3 | <input type="checkbox"/> | 1 | NBR | COM | 001 | ug/m^3 | 079 | R&P SA246B TEOM | ** |

| | | | | | | | | | | | |
|----------------------|-------|-------|---|--------------------------|-----|-----|-----|-----|---------|-----|----------------------------|
| PM10 - Total STP | 81102 | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 001 | ug/m^3 | 127 | Lo-Vol R&P 2025 Sequential |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 127 | Lo-Vol R&P 2025 Sequential |

Glover

AQS Site Number **29-093-0033**

Highway 49, approx. 0.4m South Highways 21/49/72 Intersection, Glover, 63620

Latitude: 37.48964 **AQCR:** 138 SE Missouri

Longitude: -90.69247 **MSA:** 0000 Not in a MSA

Elevation (ft): 881

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|-------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|---------------------------------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 803 | Off-Site Avg Temperature | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 803 | Off-Site Avg Pressure | |

Herculaneum, Dunklin High School

AQS Site Number **29-099-0005**

1 Black Cat Dr., Herculaneum, MO, 63048

Latitude: 38.267222 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.37833 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 445

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|-------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|---------------------------------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Herculaneum, Mott Street

AQS Site Number **29-099-0027**

Mott Street, Herculaneum, MO, 63048

Latitude: 38.263394 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.379667 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 468

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|---------------------------------|----------|------------------|-----|-------------------------------------|------|-------|-----|---------------|-----------|-----------------|---|--------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input checked="" type="checkbox"/> | 1/1 | MID | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input checked="" type="checkbox"/> | 1/1 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |
| Sulfur Dioxide | 42401 | SLAMS | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |
| Sulfur Dioxide Max 5-min Avg | 42406 | SPM | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

Herculaneum, Sherman

AQS Site Number **29-099-0013**

460 Sherman St., Herculaneum, MO, 63048

Latitude: 38.27171 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.376520 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 462

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|-------------------------------|----------|------------------|-----|--------------------------|------|-------|-----|---------------|-----------|-----------------|---|--------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |

Sample Baro Pressure 68108 SPM 1 ☐ 1/3 N/A COM 059 mm (Hg) 780 Instrumental

Hillcrest High School

AQS Site Number **29-077-0036**

3319 N. Grant, Springfield, MO 65803

Latitude: 37.256069 **AQCR:** 139 SW Missouri
Longitude: -93.299692 **MSA:** 7920 Springfield, MO
Elevation (ft): 1321

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|--------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-------|-------------|-------------------------|----------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | URB | COM | 007 | ppm | 047 | Ultraviolet Photometric | ^^ |

Ladue (PM2.5;DF to replace VSCC)

AQS Site Number **29-189-3001**

73 Hunter Ave., Ladue, MO 63124

Latitude: 38.65021 **AQCR:** 070 Metropolitan St. Louis
Longitude: -90.35036 **MSA:** 7040 St. Louis, MO-IL
Elevation (ft): 528

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|---------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|--------------------------|----------------|
| Acceptable PM2.5 AQI/SPEC | 88502 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | ^^ |
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | ** |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | ^^ |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | ^^ |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 - LC | 88101 | SLAMS | 3 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 181 | PM2.5 VSCC FEM | ^^ |

| | | | | | | | | | | | | |
|----------------------------|-------|-------|---|--------------------------|---|-----|-----|-----|-----------|-----|--------------------------|----|
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Tot Atmospheric | 88500 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | ^^ |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Volatile Channel | 88503 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | ^^ |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | ** |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | ^^ |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | ^^ |

Liberty

AQS Site Number **29-047-0005**

Highway 33 & County Home Rd., Liberty, MO 64068

Latitude: 39.303056 **AQCR:** 094 Metropolitan Kansas City

Longitude: -94.376389 **MSA:** 3760 Kansas City, MO-KS

Elevation (ft): 930

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|---------------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-----------|-------------|--------------------------|----------------|
| Acceptable PM2.5 AQI/SPEC | 88502 | SPEC | 5 | <input type="checkbox"/> | 1/3 | NBR | RES | 105 | ug/m^3-LC | 810 | METONE SASS | |
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | URB | MET | 017 | deg C | 040 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |

| | | | | | | | | | | | |
|----------------------------|-------|-------|---|--------------------------|---|-----|-----|-----|-----------|-----|--------------------------|
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FDMS-Gravimetric 1405-DF |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental |
| Solar Radiation | 63301 | SPM | 1 | <input type="checkbox"/> | 1 | URB | MET | 079 | W/m^2 | 011 | Instrumental |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | URB | MET | 014 | deg | 020 | Vector Summation |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | URB | MET | 012 | mph | 020 | Vector Summation |

Margaretta

AQS Site Number **29-510-0086**

4520 Margaretta, St. Louis, MO 63105

Latitude: 38.673172 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.239086 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 514

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor-Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit-Code</i> | <i>Unit</i> | <i>Method-Code</i> | <i>Method</i> | <i>Monitor-Status</i> |
|--------------------|-----------------|---------------------|------------|--------------------------|-------------|--------------|------------|------------------|-------------|--------------------|----------------------|-----------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Nitric Oxide | 42601 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 074 | Chemiluminescence | ^^ |
| Nitrogen Dioxide | 42602 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 074 | Chemiluminescence | ^^ |
| Oxides of Nitrogen | 42603 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 074 | Chemiluminescence | ^^ |
| PM10 - Total STP | 81102 | SLAMS | 3 | <input type="checkbox"/> | 1 | NBR | COM | 001 | ug/m^3 | 079 | R&P SA246B TEOM | ^^ |
| Sulfur Dioxide | 42401 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 060 | Pulsed Fluorescent | ^^ |

Sulfur Dioxide Max 5-min Avg 42406 SLAMS 1 ☐ 1 NBR COM 008 ppb 060 Pulsed Fluorescent ^^

Mark Twain State Park AQS Site Number 29-137-0001

20057 State Park Office Rd., Stoutville, MO 65283

Latitude: 39.47510 **AQCR:** 137 Northern Missouri

Longitude: -91.78899 **MSA:** 0000 Not in a MSA

Elevation (ft): 710

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|----------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|--------|-------------|-------------------------|----------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input type="checkbox"/> | 1 | REG | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| PM10 - Total STP | 81102 | SPM | 3 | <input type="checkbox"/> | 1 | REG | SIP | 001 | ug/m^3 | 079 | R&P SA246B TEOM | |
| Sulfur Dioxide | 42401 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 060 | Pulsed Fluorescent | ** |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | REG | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | REG | MET | 012 | mph | 020 | Vector Summation | |

Maryland Heights AQS Site Number 29-189-0014

13044 Marine Ave., Maryland Heights, MO 63146

Latitude: 38.7109 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.4759 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 633

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|---------------------|----------|--------------|-----|-------------------------------------|------|-------|-----|-----------|-------|-------------|-------------------------|----------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | ^^ |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 015 | deg F | 040 | Electronic Averaging | ^^ |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | ^^ |

| | | | | | | | | | | | | |
|----------------------------|-------|-----|---|--------------------------|---|-----|-----|-----|-----|-----|------------------|----|
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | ^^ |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | ^^ |

Missouri State University (PM10:TEOM to replace Lo-Vol) AQS Site Number 29-077-0032

710 S. Holland St. at Madison St., Springfield, MO 65806

Latitude: 37.199473 **AQCR:** 139 SW Missouri

Longitude: -93.284681 **MSA:** 7920 Springfield, MO

Elevation (ft): 1316

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|--------------------------|-----------------|---------------------|------------|--------------------------|-------------|--------------|------------|------------------|-------------|--------------------|----------------------------|-----------------------|
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | |
| Ambient Temperature | 68105 | SPM | 3 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 127 | Lo-Vol R&P 2025 Sequential | ^^ |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | |
| PM10 - Total STP | 81102 | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 001 | ug/m^3 | 127 | Lo-Vol R&P 2025 Sequential | ^^ |
| PM10 - Total STP | 81102 | SLAMS | 3 | <input type="checkbox"/> | 1 | NBR | COM | 001 | ug/m^3 | 079 | R&P SA246B TEOM | ** |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FDMS-Gravimetric 1405-DF | |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | |

Sample Baro Pressure 68108 SPM 3 ☐ 1/6 N/A COM 059 mm (Hg) 127 Lo-Vol R&P 2025 ^^
Sequential

New Bloomfield

AQS Site Number **29-027-0002**

2625 Meadow Lake View, New Bloomfield, MO, 65063

Latitude: 38.70608 **AQCR:** 137 Northern Missouri

Longitude: -92.09308 **MSA:** 0000 Not in a MSA

Elevation (ft): 860

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|----------------------------|----------|------------------|-----|-------------------------------------|------|-------|-----|---------------|-------|-----------------|-------------------------|--------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

Oakville

AQS Site Number **29-189-0015**

6115 Frontenac Pointe Ct., Oakville, MO 63129

Latitude: 38.45671 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.327477 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 477

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|----------------------------|----------|------------------|-----|--------------------------|------|-------|-----|---------------|--------|-----------------|----------------------|--------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | ^^ |
| PM10 - Total STP | 81102 | SLAMS | 3 | <input type="checkbox"/> | 1 | MID | COM | 001 | ug/m^3 | 079 | R&P SA246B TEOM | ^^ |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | ^^ |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | ^^ |

Oates**AQS Site Number**29-179-0034

13155 Highway KK, Boss, MO 65440

Latitude: 37.56485 **AQCR:** 138 SE Missouri**Longitude:** -91.11423 **MSA:** 0000 Not in a MSA**Elevation (ft):** 1134

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---------------------------------------|----------------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 803 | Off-Site Avg Temperature | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 803 | Off-Site Avg Pressure | |

Orchard Farm**AQS Site Number**29-183-1004

2165 Highway V, St. Charles, MO 63301

Latitude: 38.8994 **AQCR:** 070 Metropolitan St. Louis**Longitude:** -90.44917 **MSA:** 7040 St. Louis, MO-IL**Elevation (ft):** 441

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|--------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|-------------------------|----------------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | URB | COM | 007 | ppm | 047 | Ultraviolet Photometric | |

Pacific**AQS Site Number**29-189-0005

18701 Old Highway 66, Pacific, MO 63039

Latitude: 38.4902 **AQCR:** 070 Metropolitan St. Louis**Longitude:** -90.7052 **MSA:** 7040 St. Louis, MO-IL**Elevation (ft):** 524

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|--------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|----------------------|----------------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | ^^ |

| | | | | | | | | | | | | |
|----------------------------|-------|-------|---|-------------------------------------|---|-----|-----|-----|-------|-----|-------------------------|----|
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | ^^ |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | ^^ |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | ^^ |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | ^^ |

Park Hills

AQS Site Number **29-187-0006**

105 Industrial Dr., Park Hills, MO 63601

Latitude: 37.86485 **AQCR:** 138 SE Missouri
Longitude: -90.50804 **MSA:** 0000 Not in a MSA
Elevation (ft): 743

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|-------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|---------------------------------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 803 | Off-Site Avg Temperature | |
| Lead (TSP) - LC FRM/FEM 14129 | | SPM | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 803 | Off-Site Avg Pressure | |

Pevely

AQS Site Number **29-099-0009**

500 Dow Industrial Dr., Pevely, MO 63070

Latitude: 38.2861 **AQCR:** 070 Metropolitan St. Louis
Longitude: -90.38094 **MSA:** 7040 St. Louis, MO-IL
Elevation (ft): 409

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|-------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|---------------------------------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Pevely North**AQS Site Number 29-099-0026**

Tiarre at the Abbey, Station 150N, Christine Drive, Pevely, MO 63070

Latitude: 38.296 **AQCR:** 070 Metropolitan St. Louis**Longitude:** -90.393 **MSA:** 7040 St. Louis, MO-IL**Elevation (ft):** 582

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|-------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|---|----------------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Richards Gebaur - South (PM2.5:DF to replace VSCC)**AQS Site Number 29-037-0003**

1802 E. 203rd Street, Belton, MO, 64012

Latitude: 38.75976 **AQCR:** 094 Metropolitan Kansas City**Longitude:** -94.57997 **MSA:** 3760 Kansas City, MO-KS**Elevation (ft):** 1031

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|--------------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|----------------------------------|----------------------------|
| Acceptable PMCoarse - LC 86502 | | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | ** |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | ** |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | ** |
| PM2.5 - LC | 88101 | SLAMS | 3 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 181 | PM2.5 VSCC FEM | |

| | | | | | | | | | | | | |
|----------------------------|-------|-------|---|--------------------------|---|-----|-----|-----|-----------|-----|--------------------------|----|
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Tot Atmospheric | 88500 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | |
| PM2.5 Volatile Channel | 88503 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | ** |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

Rocky Creek

AQS Site Number **29-047-0006**

13131 Highway 169 NE., Smithville, MO 64089

Latitude: 39.33188 **AQCR:** 094 Metropolitan Kansas City

Longitude: -94.5806 **MSA:** 3760 Kansas City, MO-KS

Elevation (ft): 993

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor-Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit-Code</i> | <i>Unit</i> | <i>Method-Code</i> | <i>Method</i> | <i>Monitor-Status</i> |
|----------------------------|-----------------|---------------------|------------|-------------------------------------|-------------|--------------|------------|------------------|-------------|--------------------|-------------------------|-----------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

Savannah

AQS Site Number **29-003-0001**

11796 Highway 71, Savannah, MO 64485

Latitude: 39.9544 **AQCR:** 137 Northern Missouri

Longitude: -94.849 **MSA:** 7000 St. Joseph, MO

Elevation (ft): 1120

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|----------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|-------------------------|----------------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

South Broadway

AQS Site Number **29-510-0007**

8227 South Broadway, St. Louis, MO 63111

Latitude: 38.5425 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.263611 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 452

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|--------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|--------------------------|----------------------------|
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |
| Baro Pressure | 64101 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FDMS-Gravimetric 1405-DF | ^^ |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |

| | | | | | | | | | | | | |
|------------------------|-------|-----|---|--------------------------|---|-----|-----|-----|-----------|-----|--------------------------|----|
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ^^ |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | |

South Charleston

AQS Site Number **29-077-0026**

5012 S. Charleston, Springfield, MO 65804

Latitude: 37.122561 **AQCR:** 139 SW Missouri

Longitude: -93.263161 **MSA:** 7920 Springfield, MO

Elevation (ft): 1234

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-------|-------------|----------------------|----------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Sulfur Dioxide | 42401 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 060 | Pulsed Fluorescent | ^^ |
| Sulfur Dioxide Max 5-min Avg | 42406 | SLAMS | 1 | <input type="checkbox"/> | 1 | NBR | COM | 008 | ppb | 060 | Pulsed Fluorescent | ^^ |

St. Joe State Park

AQS Site Number **29-187-0007**

2800 Pimville Rd., Park Hills, MO 63601

Latitude: 37.81413 **AQCR:** 138 SE Missouri

Longitude: -90.50738 **MSA:** 0000 Not in a MSA

Elevation (ft): 937

| Pollutant | AQS Code | Monitor-Type | POC | Col | Freq | Scale | Obj | Unit-Code | Unit | Method-Code | Method | Monitor-Status |
|-------------------------------|----------|--------------|-----|--------------------------|------|-------|-----|-----------|-----------|-------------|---------------------------------------|----------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 803 | Off-Site Avg Temperature | |
| Lead (TSP) - LC FRM/FEM 14129 | | SPM | 1 | <input type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/3 | N/A | COM | 059 | mm (Hg) | 803 | Off-Site Avg Pressure | |

St. Joseph Pump Station (DF to be collocated)**AQS Site Number 29-021-0005**

S. Highway 759, St. Joseph, MO 64501

Latitude: 39.741667 **AQCR:** 094 Metropolitan Kansas City**Longitude:** -94.858333 **MSA:** 7000 St. Joseph, MO**Elevation (ft):** 845

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|--------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|----------------------------------|----------------------------|
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | |
| Ambient Temperature | 68105 | SPM | 3 | <input checked="" type="checkbox"/> | 1/3 | N/A | COM | 017 | deg C | 127 | Lo-Vol R&P 2025 Sequential | |
| Baro Pressure | 64101 | SPM | 1 | <input checked="" type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | |
| PM10 - LC | 85101 | SPM | 5 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | |
| PM10 - LC | 85101 | SPM | 1 | <input checked="" type="checkbox"/> | 1/3 | NBR | COM | 105 | ug/m^3-LC | 127 | Lo-Vol R&P 2025 Sequential | |
| PM10 - Total STP | 81102 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1/3 | NBR | COM | 001 | ug/m^3 | 127 | Lo-Vol R&P 2025 Sequential | |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FMDS- Gravimetric 1405- DF | |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input checked="" type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input checked="" type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | |
| Relative Humidity | 62201 | SPM | 1 | <input checked="" type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | |
| Sample Baro Pressure | 68108 | SPM | 3 | <input checked="" type="checkbox"/> | 1/3 | N/A | COM | 059 | mm (Hg) | 127 | Lo-Vol R&P 2025 Sequential | |

Trimble**AQS Site Number 29-049-0001**

7536 SW. O Highway, Trimble, MO 64492

Latitude: 39.5306 **AQCR:** 137 Northern Missouri
Longitude: -94.556 **MSA:** 3760 Kansas City, MO-KS
Elevation (ft): 955

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|----------------------------|-----------------|--------------------------|------------|-------------------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|-------------------------|----------------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 007 | ppm | 047 | Ultraviolet Photometric | |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation | |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation | |

Troost (PM2.5:DF to replace VSCC)**AQS Site Number 29-095-0034**

724 Troost (Rear), Kansas City, MO 64106

Latitude: 39.104722 **AQCR:** 094 Metropolitan Kansas City
Longitude: -94.570556 **MSA:** 3760 Kansas City, MO-KS
Elevation (ft): 971

| <i>Pollutant</i> | <i>AQS Code</i> | <i>Monitor- Type</i> | <i>POC</i> | <i>Col</i> | <i>Freq</i> | <i>Scale</i> | <i>Obj</i> | <i>Unit- Code</i> | <i>Unit</i> | <i>Method- Code</i> | <i>Method</i> | <i>Monitor- Status</i> |
|------------------------------|-----------------|--------------------------|------------|--------------------------|-------------|--------------|------------|-----------------------|-------------|-------------------------|----------------------------------|----------------------------|
| Acceptable PM2.5 AQI/SPEC | 88502 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | |
| Acceptable PMCoarse - LC | 86502 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS- Gravimetric 1405- DF | ** |
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/1 | N/A | COM | 017 | deg C | 118 | Lo-Vol R&P 2025 Sequential | |
| Ambient Temperature | 68105 | SPM | 3 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 127 | Lo-Vol R&P 2025 Sequential | |
| Baro Pressure | 64101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 059 | mm (Hg) | 014 | Instrumental | ** |
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |

| | | | | | | | | | | | | |
|------------------------------|-------|-------|---|-------------------------------------|-----|-----|-----|-----|-----------|-----|----------------------------|----|
| Nitric Oxide | 42601 | SPM | 1 | <input type="checkbox"/> | 1 | URB | COM | 008 | ppb | 074 | Chemiluminescence | |
| Nitrogen Dioxide | 42602 | SLAMS | 1 | <input type="checkbox"/> | 1 | URB | COM | 008 | ppb | 074 | Chemiluminescence | |
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging | |
| Oxides of Nitrogen | 42603 | SPM | 1 | <input type="checkbox"/> | 1 | URB | COM | 008 | ppb | 074 | Chemiluminescence | |
| PM10 - LC | 85101 | SPM | 5 | <input type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM10 - LC | 85101 | SPM | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 127 | Lo-Vol R&P 2025 Sequential | |
| PM10 - Total STP | 81102 | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 001 | ug/m^3 | 127 | Lo-Vol R&P 2025 Sequential | |
| PM2.5 - LC | 88101 | SLAMS | 3 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 181 | PM2.5 VSCC FEM | |
| PM2.5 - LC | 88101 | SLAMS | 4 | <input checked="" type="checkbox"/> | 1 | NBR | COM | 105 | ug/m^3-LC | 182 | FMDS-Gravimetric 1405-DF | ** |
| PM2.5 Tot Atmospheric | 88500 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Tot Atmospheric | 88500 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | |
| PM2.5 Volatile Channel | 88503 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 790 | FDMS-Gravimetric 1405-DF | ** |
| PM2.5 Volatile Channel | 88503 | NON-R | 3 | <input type="checkbox"/> | 1 | NBR | AQI | 105 | ug/m^3-LC | 761 | PM2.5 VSCC FDMS | |
| Relative Humidity | 62201 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 019 | %humidity | 020 | Instrumental | ** |
| Sample Baro Pressure | 68108 | SPM | 3 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 127 | Lo-Vol R&P 2025 Sequential | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/1 | N/A | COM | 059 | mm (Hg) | 118 | Lo-Vol R&P 2025 Sequential | |
| Sulfur Dioxide | 42401 | SLAMS | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |
| Sulfur Dioxide Max 5-min Avg | 42406 | SLAMS | 1 | <input type="checkbox"/> | 1 | MID | COM | 008 | ppb | 060 | Pulsed Fluorescent | |

Ursuline North

AQS Site Number **29-099-0025**

210 Glennon Heights Rd., Crystal City, MO 63019

Latitude: 38.243 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.37372 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 578

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|-------------------------------|----------|------------------|-----|--------------------------|------|-------|-----|---------------|-----------|-----------------|---|--------------------|
| Ambient Temperature | 68105 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 017 | deg C | 780 | Instrumental | |
| Lead (TSP) - LC FRM/FEM 14129 | | SLAMS | 1 | <input type="checkbox"/> | 1/6 | NBR | COM | 105 | ug/m^3-LC | 192 | Inductive Coupled Plasma Spectrometry | |
| Sample Baro Pressure | 68108 | SPM | 1 | <input type="checkbox"/> | 1/6 | N/A | COM | 059 | mm (Hg) | 780 | Instrumental | |

Watkins Mill State Park

AQS Site Number **29-047-0003**

Watkins Mill Road, Lawson, MO 64062

Latitude: 39.407419 **AQCR:** 094 Metropolitan Kansas City

Longitude: -94.265142 **MSA:** 3760 Kansas City, MO-KS

Elevation (ft): 1009

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|--------------------|----------|------------------|-----|-------------------------------------|------|-------|-----|---------------|-------|-----------------|----------------------------|--------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | URB | COM | 007 | ppm | 047 | Ultraviolet Photometric | |

West Alton

AQS Site Number **29-183-1002**

General Elecric Store, Highway 94, West Alton, MO 63386

Latitude: 38.8725 **AQCR:** 070 Metropolitan St. Louis

Longitude: -90.226389 **MSA:** 7040 St. Louis, MO-IL

Elevation (ft): 425

| Pollutant | AQS Code | Monitor- Type | POC | Col | Freq | Scale | Obj | Unit- Code | Unit | Method- Code | Method | Monitor- Status |
|--------------------|----------|------------------|-----|--------------------------|------|-------|-----|---------------|-------|-----------------|-------------------------|--------------------|
| Indoor Temperature | 62107 | SPM | 1 | <input type="checkbox"/> | 1 | N/A | MET | 017 | deg C | 013 | Electronic Averaging | |

| | | | | | | | | | | | |
|----------------------------|-------|-------|---|-------------------------------------|---|-----|-----|-----|-------|-----|-------------------------|
| Outdoor Temperature | 62101 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 017 | deg C | 040 | Electronic Averaging |
| Ozone | 44201 | SLAMS | 1 | <input checked="" type="checkbox"/> | 1 | URB | COM | 007 | ppm | 047 | Ultraviolet Photometric |
| Solar Radiation | 63301 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 079 | W/m^2 | 011 | Instrumental |
| Wind Direction - Resultant | 61104 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 014 | deg | 020 | Vector Summation |
| Wind Speed - Resultant | 61103 | SPM | 1 | <input type="checkbox"/> | 1 | NBR | MET | 012 | mph | 020 | Vector Summation |